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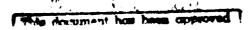
DIVIDE SECTION

# ARCHAEOLOGICAL SALVAGE **EXCAVATIONS** AT THE L.A. STRICKLAND | SITE (22Ts765) TISHOMINGO COUNTY, MISSISSIPPI



**US Army Corps** of Engineers

Nashville District





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20. ABSTRACT (Continue on reverse side if necessary and identity by block number) Archaeological salvage excavations at the L.A. Strickland I (22Ts765) revealed the presence of two major occupations of the site, located in the upper headwaters of Mackeys Creek in central Tishomingo County, Mississippi, defined as the Tennessee Tombigbee Divide Hills ecozone. The first of these sites, a prehistoric Indian settlement of the Middle Woodland period, dates to approximately A.D. 650. The second use of the site was for a turn of the century railroad building camp. Materials from the Middle Woodland component include a sample of artifacts from the surface.			

and disturbed plowzone, information on the form and content of a tightly clustered group of three cooking pits, and a series of radiocarbon dates from these pits which showed an average date of A.D. 644-62 years. The Middle Woodland ceramic assemblage includes sand tempered, limestone tempered, and crushed-sandstone tempered pottery. The lithic assemblage includes Flint Creek type projectile points, a variety of biface tools, tool fragments, and chipping debris. Analysis of the artifacts and ethnobotanical materials from the site indicates that the site was occupied for a short period of time during the fall of the year by a small group of people practicing bread spectrum hunting and gathering. The most important result of the excavation was the establishment of a beginning point from which a generalized model of Middle Woodland settlement-subsistence systems can be refined through further research in the Upper Tombighae region.

The second use of the site was ca. 1905-1907 for a railroad building camp. The artifact assemblage from this component included broken glass, ceramics and a variety of metal artifacts. In addition, two pit features of unknown function and a number of post holes were investigated. The railroad was built by the Illinois Central Railroad and was associated with the exploitation of timber in the area.

# ARCHAEOLOGICAL SALVAGE EXCAVATIONS AT THE L.A. STRICKLAND I SITE (22Ts765) TISHOMINGO COUNTY, MISSISSIPPI

by
John W. O'Hear
and
Thomas L. Conn

with
A Study of the Archaeological Plant Remains
by
Margaret Mosenfelder
as

Appendix

Prepared under the direction of Crawford H. Blakeman, Jr. Principal Investigator

A final report on work done in cooperation with the United States Army Corps of Engineers, Nashville District Office, in fulfillment of Contract numbers DACW62-76-M-3450 and DACW62-77-M-0046

Department of Anthropology Mississippi State University Mississippi State, Mississippi December, 1978



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#### ABSTRACT

Archaeological salvage excavations at the L. A. Strickland I (22Ts765) revealed the presence of two major occupations of the site. The first of these, a prehistoric Indian settlement of the Middle Woodland period, dates to approximately A.D. 650. The second use of the site was for a turn of the century railroad building camp. Materials from the Middle Woodland component include a sample of artifacts from the surface and disturbed plowzone, information on the form and content of a tightly clustered group of three cooking pits, and a series of radiocarbon dates from these pits which showed an average date of A.D. 644 ± 62 years. The Middle Woodland ceramic assemblage includes sand tempered, limestone tempered, and crushedsandstone tempered pottery. The lithic assemblage includes Flint Creek type projectile points, a variety of biface tools, tool fragments, and chipping debris. Analysis of the artifacts and ethnobotanical materials from the site indicates that the site was occupied for a short period of time during the fall of the year by a small group of people practicing broad spectrum hunting and gather-The most important result of the excavation was the establishment of a beginning point from which a generalized model of Middle Woodland settlement-subsistence systems can be refined through further research in the Upper Tombigbee region.

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Crawford H. Blakeman, Jr.

Principal Investigator

The L.A. Strickland I site (22Ts765) was found during a Cultural Resources Survey of the Divide-Cut Section of the Tennessee-Tombigbee Waterway conducted by the University of Mississippi under the direction of Dr. Robert M. Thorne. The description of the site contained in the report on this survey (Thorne 1976) is reproduced in its entirety below.

The L.A. Strickland I site (22Ts765) is located on the easter side of the headwater area of Mackeys Creek and is between a creek and the existing railroad. The stream bottom is narroat this point and the soil is sandy and light in color. The site is relatively large, 250 x 300 feet, and the soil color ation is darker in the central area of the site where the maconcentration of cultural debris is found. The long axis of the site is perpendicular to the creek and oriented in an east-west direction. The site was planted in corn and the property owner's attitude toward the Corps of Engineers and any related activity was less than favorable, which curtailed to some extent the full exploration of the site. Surface collection included ceramics, which is a notable inclusion, since only one other site south of the Tennessee-Tombigbee drainage divide yielded sherds (Thorne 1976: 284).

The "less than favorable" property owner's attitude referred to in this description consisted of a remark similar to "I'll shoot you if I catch you on my land." Because of this, it was not possible for the University of Mississippi survey crew to conduct any testing of the site. The artifacts gathered from the site by this survey were obtained from a very hasty surface collection (Robert Thorne 1976, personal communication). Based on his surface collection, Thorne hypothesized that prehistoric components from the Early to Middle Archaic, Late Archaic, Early Woodland and Middle Woodland periods were present at the site (Thorne 1976: 285). His recommendations for the site are as follows:

Since this is one of three ceramic bearing sites located in the Mackey's Creek drainage during 1975 and appears to be a multi-component site, maximum excavation is recommended. Careful excavation of the undisturbed portion of the deposit will yield valuable data which can be used in fully developing the chronology of the area. It can also serve as a beginning point for comparison of activities carried out on either side of the Tennessee River Divide ridge (Thorne 1976: 354).

Based on Thorne's survey report recommendation, the site was considered eligible for inclusion in the National Register of Historic Places and was included in a Memorandum of Agreement, dated July 6, 1976, between the Nashville District Office of the U.S. Army Corps of Engineers, the Mississippi State Historic Preservation Office, and the Advisory Council on Historic Preservation.

On September 14, 1976, a contract was let by the Nashville District of the U.S. Army Corps of Engineers to Mississippi State University to perform archaeological salvage excavations at the site, since it was to be completely destroyed by the construction of the dewatering test trench section of the Divide-Cut. Field work was begun on September 27, 1976 and completed on October 15, 1976 after a one week extension beyond the two weeks originally allotted to the project. The senior author served as the Field Supervisor and the junior author as Field Assistant.

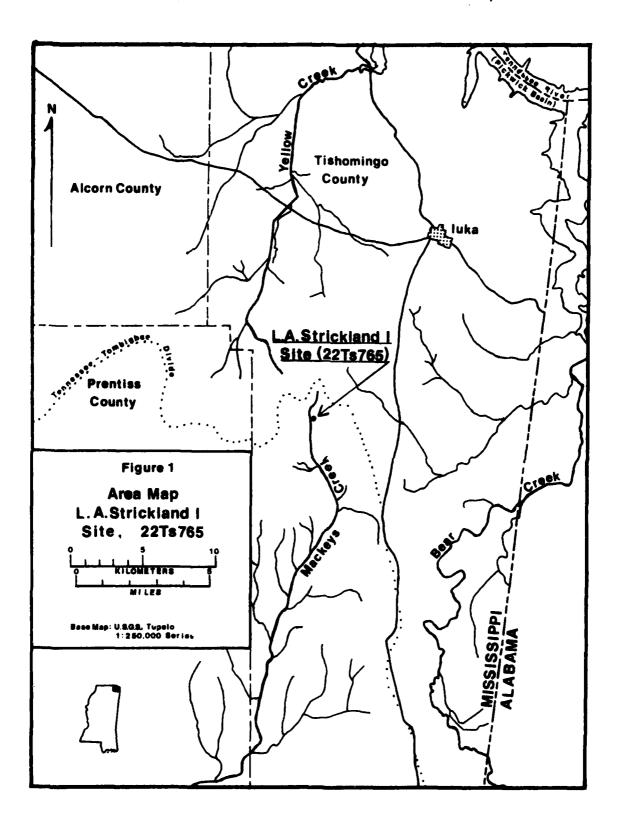
#### II. THE SITE AND ITS SETTING

#### **Environmental Setting**

The L.A. Strickland I site is located in the upper headwaters of Mackeys Creek in central Tishomingo County, Mississippi (Fig. 1). This area is within the portion of the upper coastal plain which has recently been defined as the Tennessee Tombigbee Divide Hills ecozone (Miller and others, 1973: 13). This zone extends from the Tennessee River southward to the vicinity of the intersection of Mackeys Creek with the bottomlands of the East Fork of the Tombigbee River. The topography is characterized by rugged hills and ridges which have resulted from the erosion of a plateau composed of Mississippian limestones, shales, and cherts overlain by Cretaceous gravels and sands (Lowe 1921: 30). It is these hills which form the drainage divide between the Tennessee and Tombigbee Rivers. The Tennessee-Tombigbee Divide Hills comprise the most elevated portion of Mississippi, rising above the Coastal Plain to reach a maximum elevation of 268 meters MSL at Woodall Mountain south of Iuka. Average elevation, however, is approximately 213 meters, with local differences in relief between 66 and 33 meters being common (Kelley 1974: 4). The soils are derived primarily from upper Cretaceous formations and are sandy, acidic, and infertile except in the drainage bottoms (Lowe 1921: 30).

Although no meteorological records exist for Tishomingo County, Alcorn County data can approximate the prevailing climate conditions. The mean annual temperature is approximately 60°F, with an average of 42°F in January and 81°F in July. The length of the growing season is about 217 days, commencing after the last killing frost about March 28 and terminating with the first annual frost about October 31. Mean annual precipitation is approximately 54 inches, with maximum precipitation (5.60 in) falling in March, and the least (3.3 in) falling in September (U.S.D.A. 1941: 935; Saltsman and Cross 1974: 12-14). An analysis of plant remains recovered from 22Ts765 suggests that climatic conditions during the Middle Woodland occupation of the site (A.D. 650) were similar to those present today (see Appendix).

The upper Mackeys Creek area constitutes a relatively lush microenvironmental zone surrounded by drier clay hills. Adjacent to the site, the flood plain is approximately 100 meters wide, and the hills, which are more rugged than those on the north side of the divide, rise above the creek approximately 40 meters. The width of the creek varies from approximately 4 meters where it is impounded by beaver dams to approximately 2 meters at narrow points. The creek is shallow, but attains depths of approximately .5 meter.



The natural vegetation of the Tennessee-Tombigbee Divide Hills region is diverse, and contains many species which are associated with the Appalachians and not commonly encountered elsewhere in Mississippi (Lowe 1921: 32). A recent vegetative survey of the area identified a total of 719 taxa, of which 3 species were pines, 16 oaks, 6 hickories, 3 elms, 2 maples and 4 hollies (Coleman 1975: 30). Forest composition is far from uniform and varies between the xeric uplands and the fertile, mesic bottomland habitats. The hills were originally forested in shortleaf pine mixed with post, blackjack, and Spanish oaks --with white and red oaks, yellow poplar, and dogwood on slopes and adjacent to the heads of streams (Dunston 1910: 11). Currently, the shortleaf pine component of the forests is not reproducing well, however, probably due to the control of fires (Coleman 1975: 41). The botanical material recovered from 22Ts765, which included seeds and wood from subclimax species requiring a decade or more to reach fruit-bearing maturity, is evidence for human or natural disturbance in the area ca. A.D. 650 (Appendix ). Today the forests surrounding the vicinity of the L.A. Strickland I site contain mixed oaks, hickories, pines, sweetgum, tupelo gum, maples, and elm, with actual composition in any locality depending on moisture, fertility, and agricultural practices (U.S. Army Corps of Engineers, Paden Quadrangle Habitat Map).

During prehistoric times the Tennessee-Tombigbee Divide Hills were inhabited by a diverse fauna which could have been exploited by the inhabitants of the Mackeys Creek area. Included among those mammals known to have been hunted aboriginally in the southeastern United States were the black bear, fox, racoon, beaver, and otter, as well as currently popular game animals such as the white tailed deer, rabbit, and squirrel. Both aquatic and terrestrial turtles are found in the area, as well as avian species such as the wild turkey and quail. Mackeys Creek, albeit a relatively small stream, harbors various types of sunfish as well as smallmouth bass. Although the Tennessee-Tombigbee Divide Hills contain some of the poorest habitat ratings of the four ecozones traversed by the Tennessee-Tombigbee Waterway, the L.A. Strickland I site, with its propinquity to water and its location in the diverse mixed oak-hickory bottoms environment, was an ideal location for exploiting the resources found in the region.

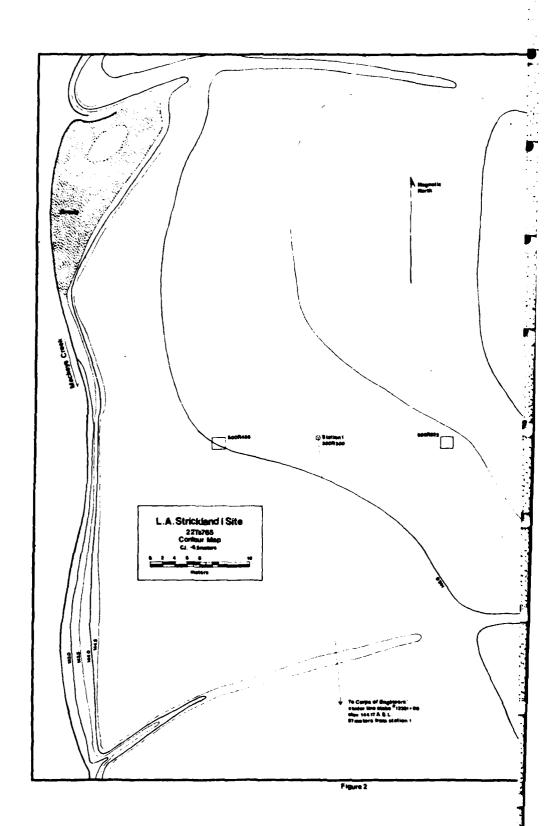
Four other small streams, Burgess Creek, Hurricane Creek, Black Branch and Panther Creek, converge with Mackeys Creek at intervals between .5 and 3 km.downstream from the site. These other streams share the same general environmental situation which characterizes the upper Mackeys Creek area, and probably share a similar occupational history.

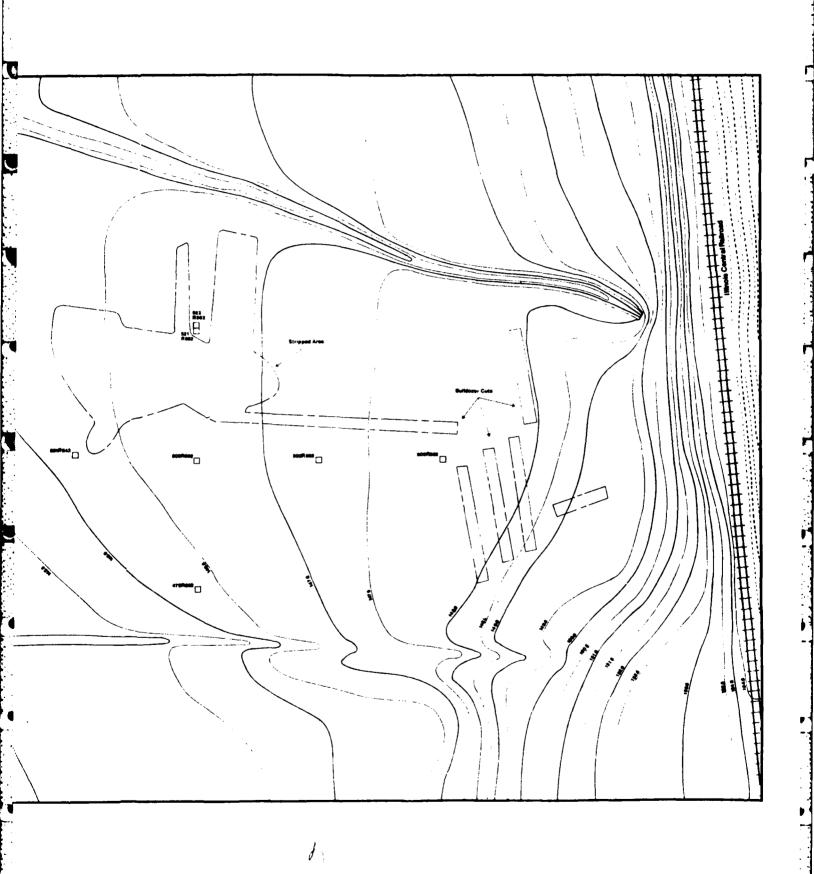
# Site Description

The L.A. Strickland I site is located in the eastern flood plain of Mackeys Creek, approximately 2 miles from the creek's uppermost

reaches at the Tennessee-Tombigbee drainage divide. Specific location of the site is the Southeast Quarter of the Southeast Quarter, Section 30. Township 4 South, Range 10 East in Tishomingo County, Mississippi. The main area of the site is at the northern periphery of an abandoned field about 1.8 hectares in area. The field is bordered on the east by a steep railroad embankment, built ca. 1905, on the west by Mackeys Creek, and on the north and south by drainage ditches. The field has a gentle slope from the railroad embankment down to the creek (see Fig. 2). It is difficult to discern the original topography of the east end of the field because of the disturbance resulting from construction of the embankment. While it was obvious from the beginning that construction of the railroad embankment modified the topography of the site, about midway through the field investigations it was learned that in addition a railroad construction camp had been located at the site some time around 1905. A Mr. S. A. Gentles, whose father worked at the camp, told us that the field in which the site was located was known locally as "The Camp." Several features and a moderate amount of artifacts relating to this camp were recovered by our excavations and will be discussed further below. The soil types and geomorphogeny of the site area will be discussed in the section on stratigraphy.

Prior to the purchase of the land in 1976 by the U.S. government, the site was owned by Mr. L.A. Strickland, for whom the site was named. The field was planted in corn in 1975 but by the time of our excavations in September of 1976 the entire field was overgrown with weeds 1 to 2 meters high (Plate 1 B). Virtually none of the ground surface was visible through the heavy cover. From the corn stalks still present, it was apparent that the field had been plowed with rows running parallel to the slope of the field, which undoubtedly increased the erosion of the upper parts of the field and deposition in the lower parts of the field, especially if the field had always been plowed in that fashion.





#### III. THE EXCAVATIONS

#### <u>Methodology</u>

The first steps in the investigation of the L.A. Strickland I site (22Ts765) were the establishment of a metric grid system and the preparation of a topographic map of the site area (Fig. 2). The grid system was oriented to magnetic north and placed so that it contained the whole field in the upper right quadrant. Grid points were designated  $n_1Rn_2$ , with  $n_1$  being the distance in a positive or north direction from the 00R00 origin, and  $n_2$  being the distance in a positive or east direction from the origin. The northeast stake of the individual squares served as the square designation. The 500R500 point was the main datum for the site, and was tied into a Corps of Engineers benchmark at point 12351+00 on the Divide Cut centerline. Tying into this established datum allowed elevations to be expressed in actual meters above mean sea level and will allow accurate placement of the site and excavation units in the future.

The first problem faced by the field crew was to locate the site within the overgrown field. According to Thorne's (1976: 284) description, the site measured approximately 250 x 300 ft, was oriented with its long axis east-west, and had an area of darker soil and higher artifact density in its central part. He stated that it was located between the creek and the railroad embankment.

In an effort to find this main area of the site a number of small shovel tests were made at scattered locations throughout the field. The placement of these shovel tests was intuitive rather than systematic, and they consisted of small holes approximately the diameter of a shovel. The soil from the tests was examined for artifacts but not screened, and the profile was examined. These tests showed the stratigraphy in the central, southern and eastern portions of the field to consist of a plowzone resting directly on subsoil, while deeper, apparently alluvial deposits were noted in the western side along the creek and to the north along the drainage ditch. A small stemmed projectile point (Plate IV F) found at the southern margin of the field was the only artifact found in these tests.

Excavations began at the western end of the field near the creek. Two 2x2 meter squares were excavated through virtually sterile alluvium to the water table. Then 1x1 meter squares were excavated at 20 meter intervals proceeding east along the 500 grid line (Fig. 2). All units except 521R562 were excavated by 20 cm arbitrary levels. The soil from the squares was dry screened through 1/4" mesh screen. A higher

# TABLE 1. ARTIFACTS FROM THE SURFACE \*

# CERAMICS

Sand Tempered Cord Marked Plain Eroded	1 2 8
CHIPPED LITHICS	
Projectile Points  Madison  Kays Stemmed Preform P-1 Distal End Midsection	1 1 1 3 1
Biface Tools Blank Preform Graver on Biface Fragment Biface Fragments	1 1 1 7
Uniface Tools Graver Retouched Flakes Utilized Flakes	3 12 31
DEBITAGE Primary Decortication Flakes Secondary Decortication Flakes Chunks/Cubical Shatter Biface Thinning Flakes Large Flakes Core Flaked Pebbles Pebbles	7 40 33 24 87 1 4 2
PECKED AND GROUND STONE TOOLS Quartzite Hammerstones	2
MISCELLANEOUS ROCK Ferruginous Sandstone Fragments Ferruginous Conglomerate Fragments Sandstone Quartzite Pebbles TOTAL	44 1 2 <u>4</u> 326
* Wistowia swtiftate met impluded   Con Table 6	

density of artifacts was found in square 500R562 (see Table 2), but this higher density was not immediately recognized in the field. Except for the initial 2x2 meter squares, no squares along the 500 grid line had cultural deposits below the plowzone.

A small bulldozer was then brought to the site, and a number of small trenches were cut in the eastern portion of the field (Fig. 2; Plate 1 B). These cuts averaged 20 cm in depth and removed the plowzone down to the underlying clay subsoil. It was thought that perhaps the main part of the site was located back from the creek, on ground which would not be as susceptible to flooding. No cultural features and very few artifacts were found in this eastern area. A trench was then cut with the bulldozer parallel to and north of the 500 grid line. A higher density of artifacts was observed in the spoil from the central part of this cut, but no cultural features or changes in the plow-zone - subsoil stratigraphic sequence were observed. Table 1 lists the artifacts from the spoil dirt and surface.

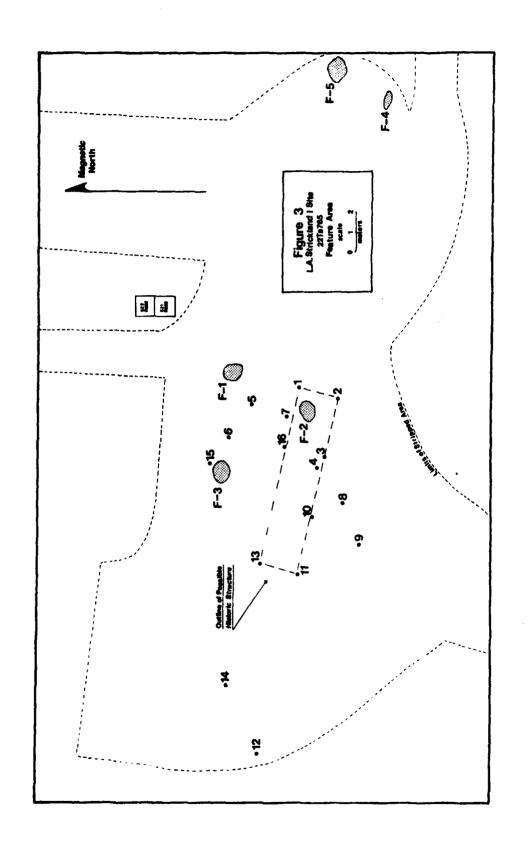
At this point analysis revealed the higher density of material in square 500R562 and two squares were excavated north and south of this unit. The south square differed little from the previous ones, but the northern square (522R562) contained a higher density of artifacts than found previously, and the profiles showed four zones between the plowzone and the subsoil. The square to the south of 522R562 was then excavated by these natural zones. Since the two weeks allocated for the field work were almost over, the bulldozer was again brought to the site and the area around these squares was stripped to the level at which cultural features could be observed. This stripping removed the plowzone and a thin zone (Zone B) underlying it, to an average depth of 25 cm.

Feature 1 was revealed by the first pass of the bulldozer (Fig. 3). In all, three aboriginal pits, two historic features, and 16 post holes were found. The fill from all of these features with the exception of Feature 3 was water screened through 1/16" and 1/4" mesh screen. Feature 3 was screened through 1/4" mesh screen only. Soil samples, pollen samples and radiocarbon samples were recovered from all pits and from most post holes. The 1/16" screen fraction of the water-screened material was floated to recover botanical material. The treatment of the fill from the individual features will be discussed in the section on features.

# Stratigraphy

The stratigraphy of the L.A. Strickland I site varied considerably in different areas of the field. Three basic sequences were observed. Deep, essentially sterile, alluvium was found in the western part of the field in squares 500R485 and 500R522. In the squares along and

336 12 26 145 12 270 890 84 ıω 2 83 12  $\infty$ 3 158 500 R602 ARTIFACTS FROM THE EXCAVATION UNITS 2 500 R582 47 522 R562 22 54 108 38 ıω 13 500 R562 489 R562 501 R542 TABLE 2. 25 28 8 17 500 R522 2 Small Triangular Preform Level/Zone Secondary Decortication Chunks/Cubical Shatter Biface Thinning Flakes Fire-cracked Quartzite Primary Decortication MISCELLANEOUS STONE Ferruginous Sandstone CHIPPED STONE ARTIFACTS Square Limestone Tempered Quartzite Pebbles Biface Perforator Retouched Flakes Notched Flakes Utilized Flakes Cord Marked TOTAL Sand Tempered fragments Large Flakes Flakes Flakes Eroded Plain Plain DEBITAGE CERAMICS



south of the 500 grid line, the stratigraphy consisted of a mixed plowzone resting directly on the clay subsoil. An exception to this was square 500R562 where a thin zone was found between the plowzone and subsoil. The deepest stratigraphy with cultural deposits was found at the northern edge of the field in squares 522R562 and 521R562. These squares contained four zones between the plowzone and subsoil. Each of these three stratigraphic sequences is described in more detail below:

Sequence 1: Squares 500R485 and 500R522 (Fig. 4)

Zone A This was the plowzone. It averaged about 20 cm in depth and consisted of a light brown sand. Plow scars were visible in the north - south profiles of both squares.

Zone B Immediately below the plowzone was a thick zone of thin, interbedded lenses of multicolored sands and silt. In square 500R485 this zone extended to the water table at a depth of 120 cm below the present surface, while in square 500R522 the zone was underlain by Zone C at a depth of 90 cm below the surface. The sand lenses varied in thickness from less than 1 mm to a maximum of 3 cm. Most were about 1 cm thick. The colors included all shades of white, grey, yellow, and orange. Interspersed in this zone were several sets of yellow or grey sand layers immediately overlain by a thin layer of red silt, indicating slackwater sorting of floodborne alluvium. A few artifacts, both prehistoric and historic, were found scattered through the entire thickness of the zone. The zone is interpreted as relatively recent alluvium resulting from flood deposition from Mackeys Creek with additional deposition of slope wash from the cultivated field.

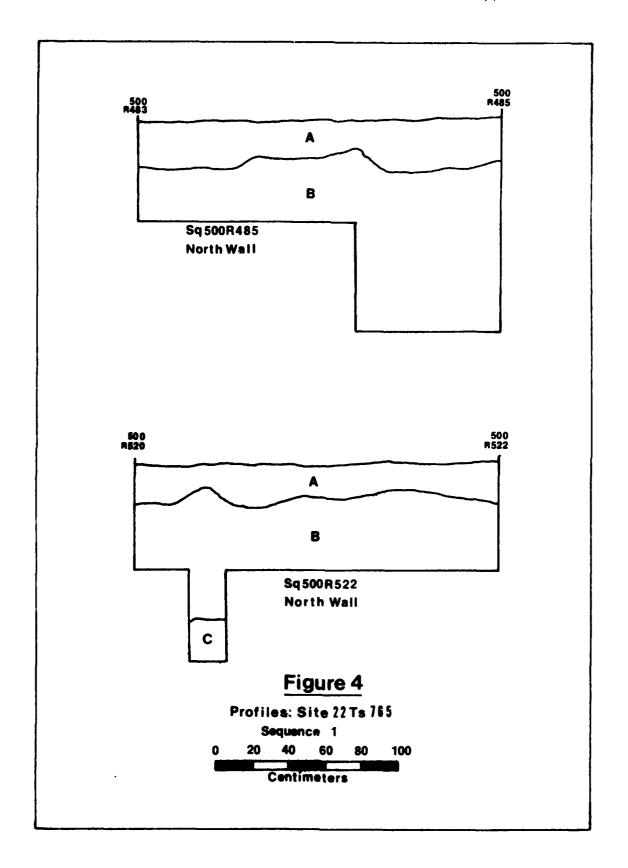
Zone C This zone was not encountered in square 500R485, but was present in a deep test carried to the water table in square 500R522. The zone was saturated with ground water and consisted of a sterile yellow clay with scattered flecks of orange clay.

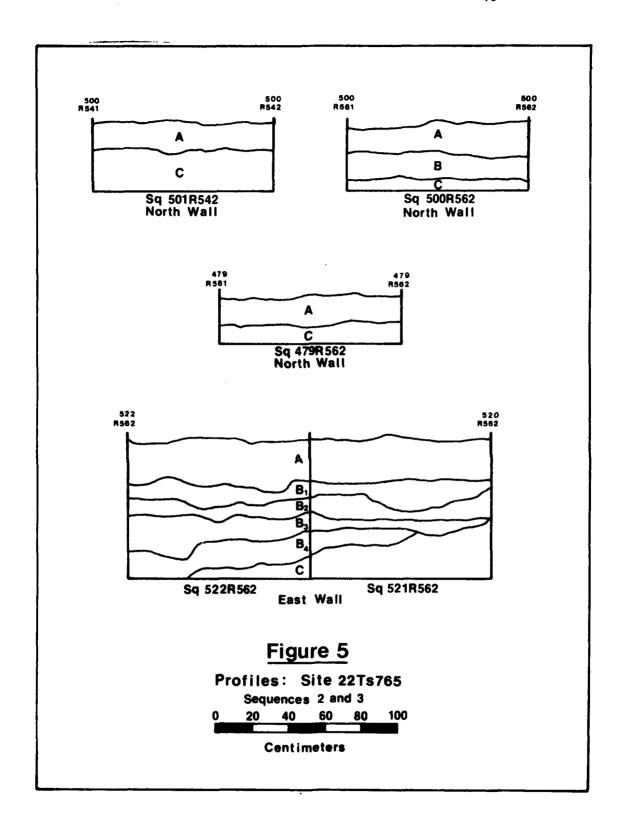
Sequence 2: Squares 501R542, 500R562, 479R562, 500R582, and 500R602

(Fig. 5)

Zone A The plowzone in these squares was a light to medium brown sand with scattered flecks of orange clay. Plow scars were readily visible in the profiles and along the base of the zone. The zone was an average of 20 cm deep.

Zone B This zone was present only in square 500R562, where it was immediately under the plowzone. The zone averaged 15 cm in thickness and was composed of a light reddish-brown sandy clay with grey and brown mottling. A few artifacts were found in this zone. All of the artifacts were small and eroded, suggesting that this is not a primarily deposited cultural zone.





Zone C This zone was the clay subsoil encountered in the central and southern parts of the field. It consisted of a uniform, reddish-brown clay and was devoid of any artifacts.

Sequence 3: Squares 522R562 and 521R562 (Fig. 5)

Zone A The plowzone in these units was a grey-brown, sandy soil mottled with darker brown sand. Small flecks of charcoal were scattered throughout, and the zone had the highest density of prehistoric and historic material of any stratigraphic unit at

the site. The average thickness of this plowzone was 20 cm.

Zone  $B_1$  The contact of Zones A and  $B_1$  was distinct and several furrows were visible in the profile. Zone  $B_1$  was a light brownishgrey, sandy soil with flecks and lines of orange clay. The zone averaged 5 to 10 cm in thickness and contained a lower density of artifacts than the plowzone.

Zone  $B_2$  The contact between Zones  $B_1$  and  $B_2$  was distinct and irregular. This zone was a medium brown, sandy soil mottled with grey and darker brown. The density of artifacts was slightly higher in this zone than in the zones immediately above or below it.

Zone  $B_3$  The transition between Zones  $B_2$  and  $B_3$  was gradual but distinct. Zone  $B_3$  was a medium grey, clayey sand mottled with orange clay fragments.

Zone  $B_4$  This was an orange-yellow, sandy clay with grey and bright orange mottling. The transition between Zones  $B_3$  and  $B_4$  was gradual. The few artifacts recovered from the zone are probably intrusive from the upper zones, and this zone is likely a sandier upper phase of the clay subsoil.

Zone C. This was a yellow, compact clay with scattered bright orange spots. The zone was sterile and basically the same as the subsoil encountered in the other areas of the site.

From what is known of the history of the L.A. Strickland I site, it appears that the site area has been considerably modified during modern times, and that most of the stratification observed in squares 522R562 and 521R562 is not the result of the aboriginal occupations but is related to the cultivation of the site, the railroad construction, and the excavation of the ditch at the northern border of the site. Zone  $B_2$  in sequence 3 is interpreted as an older plowzone which was buried by fill from the ditch excavation and/or the construction of the railroad embankment and railroad camp. We propose the following reconstruction of the alterations which have taken place at the Strickland site since the Indian occupations.

4.1.4.4

Originally, the site area was a low clay knoll, an extension of the clay hills at the eastern edge of the site. This small, relatively flat, well drained area was bordered on the north by a swale, centering roughly where the drainage ditch is today (Fig. 2). The area of Indian occupation was at the edge of the clay knoll bordering the swale.

Some time, probably in the mid-nineteenth century, the site area was first cleared and put under cultivation. The site would have been one of the first areas cleared because it was flat and reasonably well drained. A plowzone which is represented by Zone B<sub>2</sub> was developed. Some time later, possibly when construction was begun on the railroad ca. 1905, a ditch was cut in the swale to drain it and to receive runoff from the other side of the embankment coming through a pipe at the head of the ditch. The fill from the ditch, and possibly some fill introduced from some other area, was used to fill up the low area around the ditch. It may be that soil from the field itself was scraped into the swale to level off the field. This could account for the higher density of artifacts in Zones A and B. Zone A is the plowzone which was subsequently developed on this fill and Zone B<sub>1</sub> is the fill which was beneath the reach of the plow when Zone A was cultivated.

From the 522R562 to 521R562 profile (Fig. 5) the northward downsloping of the clay subsoil (Zone C) can be seen. The clay subsoil "outcropped" in the graded area south of the squares in the area where the aboriginal pits were found (see Fig. 3). North of the edge of this clay area and east of the squares, a dark, very heterogenous area of muck was uncovered by the grading. The graded surface in this mucky area was very viscous and undulated as it was walked on. This area would be part of the filled swale. The situation was much the same along the western part of the field. The edge of the clay knoll or ridge was located somewhere between squares 501R543 and 500R522, and the area between the knoll and the present creek channel has been filled with alluvium rather than introduced fill.

Any observations based on such a limited number of widely spaced excavation units such as these are of necessity very speculative, but it would appear that a process such as outlined above is the most reasonable explanation of the peculiar stratigraphic situation on the northern end of the field.

#### Features

Three prehistoric pits and two historic features were exposed during the bulldozer stripping of the site. The aboriginal pits were located in a roughly triangular cluster in the central portion of the graded area and the two historic features were located to the eastern periphery of the graded area in close proximity to each other. It is possible that additional historic features exist outside of the graded area to the east. Following are descriptions of the individual features.

## Feature 1 (Table 3, Fig. 6, Plate III)

This was the northeasternmost of the three aboriginal pits exposed during the grading of the site. It appeared as a well-defined dark brown oval stain intruding into the yellow clay subsoil.

At the top, the pit orifice measured 108 x 88 cm. The maximum depth of the pit was 36 cm. The western wall was a smooth shallow curve to a flat bottom. The eastern wall was almost vertical and undercut slightly at the bottom. Two distinct fills were present.

Fill A was a dark brown, clayey sand containing an abundance of artifacts and charcoal. The charcoal was both scattered through the fill in small fragments and present in large clumps. In the eastern and southern portion of the pit, Fill A enveloped Fill B, a lense of yellowish sand containing few artifacts and little charcoal. No difference in the composition of Fill A from above and below Zone B was observed. The clay walls of the pit were discolored to a light orange to a depth of about 1 cm, suggesting the pit had been subjected to an open fire.

Feature 1 contained the highest density of artifacts found at the site. Included were limestone, sand, and ferruginous sandstone tempered ceramics, a Flint Creek projectile point fragment, and a large amount of debitage and miscellaneous rock. The entire contents of the pit was waterscreened through 1/16" mesh, and a large amount of botanical material was recovered. Wood charcoal, hickory nut fragments and at least one small seed were observed in the field. For an analysis of the botanical material see the Appendix.

# Feature 2 (Table 3, Fig. 6, Plate IV)

This pit was also uncovered by the grading of the site and was exposed as a well defined circular stain. The pit measured  $103 \times 89$  cm at the top and was a maximum of 25 cm deep. The basic form was similar to Feature 1, as the west side was almost vertical while the east side sloped gently to the bottom. Two fills were present in the pit. Fill A was medium brown to black, clayey sand with a moderate amount of artifacts and charcoal fragments. The fill was continuous through the pit. Under Fill A and covering the entire bottom of the pit was Fill B - a light brown, clayey sand with a low density of scattered charcoal and artifacts. The sides of the pit showed signs of being subjected to an open fire.

Artifacts from the fill included sand tempered ceramics, debitage, a hammerstone and miscellaneous rock fragments. The entire fill was screened through 1/16" mesh. Wood charcoal and hickory nut fragments were observed in the fill in the field.

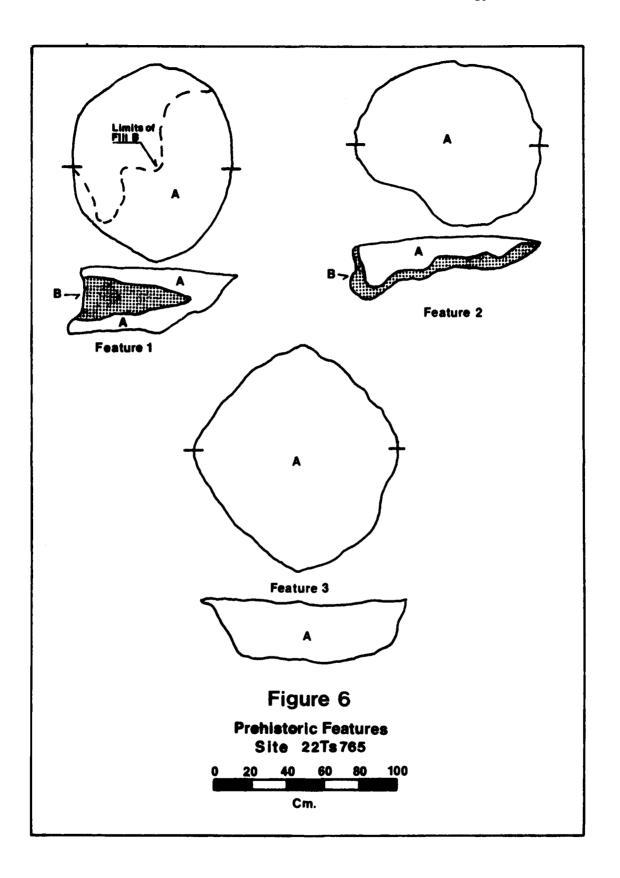
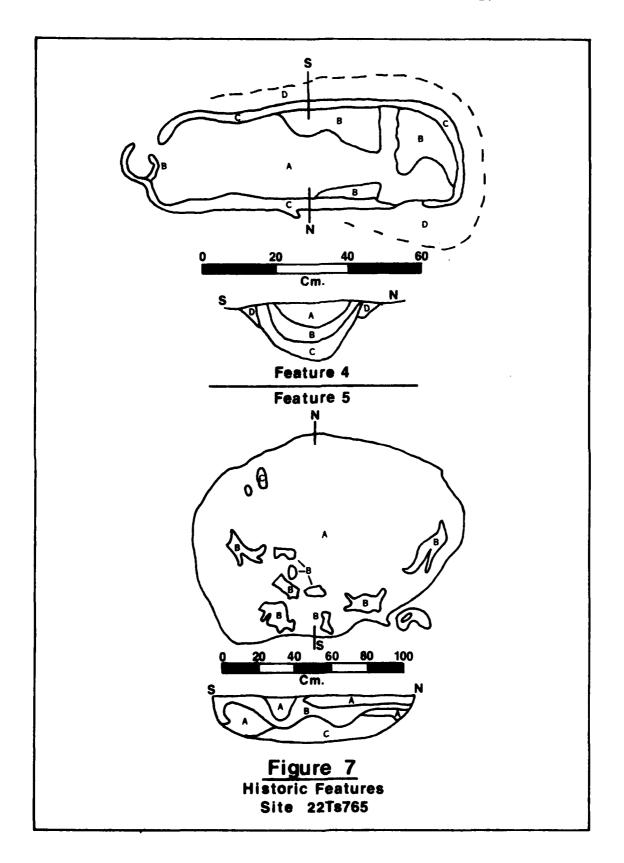


TABLE 3. ARTIFACTS FROM FEATURES

	Feature No.				
Type Material	<u> </u>	2	3	5*	Total
CERAMICS					
<u>Limestone Tempered</u> Plain	13	-	1	1	15
Sand Tempered Cordmarked	12	4	23		39
Plain	21	19	23 5	_	39 45
Eroded	76	13	33	9	131
Pinched	-	-	-	3	1
<u>Ferruginous</u> <u>Sandstone</u> Tempered					
Cord Marked	15	-	13	-	28
Eroded	29	-	2	-	31
LITHICS					
Chipped Stone Tools	_				
Flint Creek Point	1	-	j	-	2
P-1 Point Biface Preform	2	2	1	-	1
Retouched Flakes	í	-	_	-	4 1
Utilized Flakes	6	2	1	_	ġ
Debitage					
Primary Decortication					
flakes	3	7	2	1	13
Secondary Decorticatio		_	_	_	4-
flakes Chunks/Cubical Shatter	24 3	9	6 8	2 2	41 16
Biface Thinning Flakes		3 3	4	_	16
Large Flakes	90	25	30	9	154
Small Flakes	294	84	**	-	378
Pecked and Ground Stone					
Hammer Stone	-	1	-	-	1
Miscellaneous Stone					
Ferruginous Sandstone			••		
Fragments	29	17	17	-	63
Sandstone Pebbles Quartzite Pebbles	2	2 1	ī	1 2	3 6
Quartzite Fragments	3	_	-	-	3
TOTAL	633	192	148	28	1001
	<b>400</b>	136	140	20	1001



## Feature 3 (Table 3, Fig. 6)

This was a basin shaped pit with straight inslanting walls and a flat bottom. The top dimensions of the pit were 122 x 110 cm. The pit's maximum depth was 31 cm. The fill was homogenous throughout, and consisted of a dark brown, clayey sand with scattered small fragments of charcoal. No large fragments of charcoal were observed. The sides and floor of the pit were discolored in the same way as Features 1 and 2, indicating that this pit also had been subjected to an open fire. Artifacts in the feature included limestone, sand, and ferruginous sandstone tempered ceramics, two projectile points, debitage and miscellaneous rock fragments (Table 3). The fill from the pit was screened through 1/4" mesh hardware cloth, reducing the recovery of botanical material and small classes of artifacts such as small flakes.

## Feature 4 (Fig. 7, Plate V)

This was a peculiar feature located at the southeastern periphery of the graded area. Its dimensions were about 95 x 30 cm at the surface, and its depth 15 cm. It was situated in a mottled, yellow subsoil and was composed of four types of fill. The most extensive of these was C, which was black in color and contained fragments of charred and uncharred wood. The form of fill C was similar to a shallow oblong bowl or trough. Within this trough was Fill B, a hard, red clay which was exposed at the surface in only a few areas. Overlaying B was Fill A, a white sand with scattered areas of red, black, and brown stain. Fill D was another sandy area that lay outside the trough and had been stained brown by the surrounding subsoil. One artifact, a chert core, was recovered from this feature.

No satisfactory explanation for Feature 4 can be suggested. The presence of uncharred wood within its fill indicates that it must be relatively recent. However, the authors are not familiar with any historic activities which would account for its origin.

# Feature 5 (Tables 3 and 6, Fig. 7)

This was the largest feature identified at 22Ts765. Like Feature 4, it is poorly understood. At the surface its outline was roughly circular and measured approximately 150 x110 cm. In profile, its form was basin shaped, with the edges cutting down vertically for approximately 5 cm before sloping gently in toward the center to a maximum depth of 11 cm. Three different fills were recognized. Fill C was a dense, red, sandy clay with some intermixture of black and grey colored patches. Fill B was sandy in composition, charred black in color, and was never found below Fill C. Fill A was the most extensive, and appeared to represent a mixture of the other two fills.

Historic artifacts recovered from this feature included fragments of glass and iron, an iron bar, and a piece of anthracite coal.

Prehistoric artifacts from the pit fill included a plain limestone tempered sherd, a pinched sand tempered sherd, a preform fragment, debitage, a pebble, and fragments of ferruginous sandstone. Neither the historic artifact assemblage of the pit nor the pit form can be related to a specific function.

#### Post Holes

Sixteen post holes were found in the graded area of the L.A. Strickland I site. Very few of these showed attributes normally associated with prehistoric post holes in the southeastern United States, and it is felt on the basis of shape and content that most of the post holes date to the historic component at the site. A number of examples of square post holes were found, most of which contained a circular or squared oval post mold. At this point, it is necessary to distinguish between the terms "post hole" and "post mold." A post hole is the hole which was dug for erecting the post. A post mold is an area within a post hole which represents the position of the post within the post hole. In the following descriptions, the term "fill" is used to designate any internal zones within a post hole, and it is recognized that not all of these zones are the result of filling but may result from in situ decay of materials.

The following are descriptions of the individual post holes. A summary of the artifacts from the post holes is given in Table 4 and plan and cross sections views are shown in Fig. 8.

#### Post Hole 1

This square post hole measured 27 x 25 cm and had a maximum depth of 32 cm. After sectioning, two fills were observed. Fill A was a light grey sand mottled with orange, brown, and charcoal flakes. Fill B was a light brown sand with orange-brown mottling. At the base of Fill B, a star shaped piece of heart wood was found. Post Hole 1 is interpreted as a modern post. Artifacts from this post hole include sherds, a flake and ferruginous sandstone fragments.

#### Post Hole 2

This square post hole measured  $29 \times 31$  cm and had a maximum depth of 26 cm. The fill was a homogenous, greyish-brown sand mottled with red clay flecks. The fill contained two small sherds, a biface fragment, and debitage. This post hole's square shape suggests a modern origin.

#### Post Hole 3

This post hole was roughly square except for an irregular extension to the north. Dimensions of the top were  $28 \times 28$  cm. The maximum depth was 24 cm. Two fills were present in cross-section. Fill A

was a greyish sand with orange and brown mottling. Fill B was a brown sand with grey and orange flecks. Artifacts from the fills include small sherds, debitage and ferruginous sandstone fragments. This also appears to have been a modern post.

### Post Hole 4

This post hole was irregular in shape, had top dimensions of  $33 \times 25$  cm and a maximum depth of 20 cm. The fill was a dark brown, clayey sand mottled with charccal flecks. Artifacts from the fill included one sherd and debitage.

### Post Hole 5

This post hole had a round outline at the surface which measured  $19 \times 18$  cm. In cross-section, it was a rough, rounded triangle which extended to a depth of 26 cm. Two fills were present. Fill A was a greyish-brown sandy clay intermixed with red-orange clay from the surrounding subsoil. Fill B was vaguely conical in form and was a cream sand with red and brown mottling. The artifacts from the fills included a sand tempered cord marked sherd, small flakes and a piece of ferruginous sandstone.

### Post Hole 6

This feature was round in plan view, measured 26 x 23 cm at the top and was 16 cm deep. The sides were vertical and the bottom was flattened. Two fills were observed. Fill A was a grey sandy clay, and the post mold or Fill B was a sandy light brown soil containing noncarbonized wood fragments. No artifacts were found in the fill. The presence of the noncarbonized wood fragments indicates that this post hole is a product of the historic occupation.

#### Post Hole 7

Post Hole 7 was a very shallow circular stain with a diameter of approximately 20 cm and a maximum depth of 4.5 cm. The fill was a dark brown clayey sand and contained no artifacts.

#### Post Hole 8

This post hole was irregular in plan view and had a rounded outline in profile. The dimensions of the top were 32 x 31 cm and the maximum depth was 19 cm. Three fills were present. Fill A was a greyblack sand. Fill B was a brown to grey-brown sandy clay and Fill C at the bottom of the hole was a yellowish tan sand. Artifacts included in the fills were sand tempered sherds, debitage, and ferruginous sandstone fragments.

#### Post Hole 9

This was another square post, with a circular post mold in one corner. The sides of the square top measured 23 x 21 cm and the maximum depth was 24 cm. Three fills were present. Fill A comprised the bulk of the post hole and was a dark brown mottled sandy soil with small fragments of charcoal. Fill B was the central fill of the post mold and was a dark brown to black sand. Fill C was a thin band of yellowish sand that separated A and B. Among the artifacts recovered were sherds, debitage, and ferruginous sandstone fragments. The square shape of the post hole suggests another historic post.

### Post Hole 10

This post hole was roughly oval in plan view and contained a post mold towards one side. It measured 41 x 41 cm at the top, and had a maximum depth of 45 cm. Five fills were present. Fill A was uppermost and was a light grey sand with black mottling. Fill B was the inner fill of the post mold, and was a light grey to black sand. Under and surrounding Fill B was Fill C, a dark grey to black sand. At the base of the post mold and extending across the post hole was Fill D, a grey sand streaked with orange. The bottom half of the post hole, Fill E, was a homogenous grey sand. Artifacts in the fills included sand and ferruginous sandstone tempered sherds, debitage, and ferruginous sandstone fragments. This post hole is also assigned to the historic occupation of the site due to its shape.

## Post Hole 11

This feature had an irregular outline that measured 26 x 21 cm. The sides were more or less vertical. The maximum depth was 44 cm. Fill A comprised the bulk of the fill and was composed of a dark brown clayey sand with orange mottling and bits of charcoal. Fill B lined the bottom of the post hole and was an orange sand mottled with particles of orange-yellow clay. Material from the fill included limestone and sand tempered ceramics, debitage, and ferruginous sandstone fragments.

#### Post Hole 12

This post hole was also roughly square in plan view, but differed in detail from the other square post holes from the site. The top measured 24 x 21 cm and the maximum depth was 41 cm. Two fills, one defining a central post mold and the other an outer post hole, were present. Fill A, the outer fill, consisted of greyish-brown, sandy soil with scattered flecks of orange clay. The post mold, Fill B, was a dark brown, homogeneous sand. At the base of Fill B, a chunk of non-carbonized wood was found, indicating an historic date for the post. Artifacts included in the fills were sand tempered sherds, debitage, and ferruginous sandstone fragments.

### Post Hole 13

Irregular in plan view and measuring  $50 \times 60$  cm at the surface, this post hole extended to a depth of 44 cm. Two fills were present. The bulk of the fill, Fill A, was a medium brown sand mottled with dark brown and buff. Fill B was a thin line of dark brown sand which was present along one side of the hole. Artifacts from the fills included sand tempered sherds, debitage, and ferruginous sandstone.

#### Post Hole 14

This post hole was irregular in shape and contained a central post mold. The top measured  $50 \times 60$  cm and the maximum depth was 44 cm. The post mold, which was visible from the top, could not be detected when the post hole was cross-sectioned. Two fills were observed in cross-section. Fill A was a dark grey, sandy soil and comprised the bulk of the fill. Fill B was confined to one side of the post hole and was a greyish brown, sandy soil. Artifacts from the fills included one limestone tempered sherd, sand tempered sherds, debitage, and ferruginous sandstone.

### Post Hole 15

This post hole was an irregular square measuring 45 x 50 cm. Maximum depth was 21 cm. Fill A was a roughly square area of almost pure charcoal, probably the remains of a square post which was burned. Fill B was a dark grey to dark brown sandy zone. Artifacts from the fills include a limestone tempered sherd, sand tempered sherds, debitage and ferruginous sandstone fragments. The square shape of the burned post suggests another historic post.

#### Post Hole 16

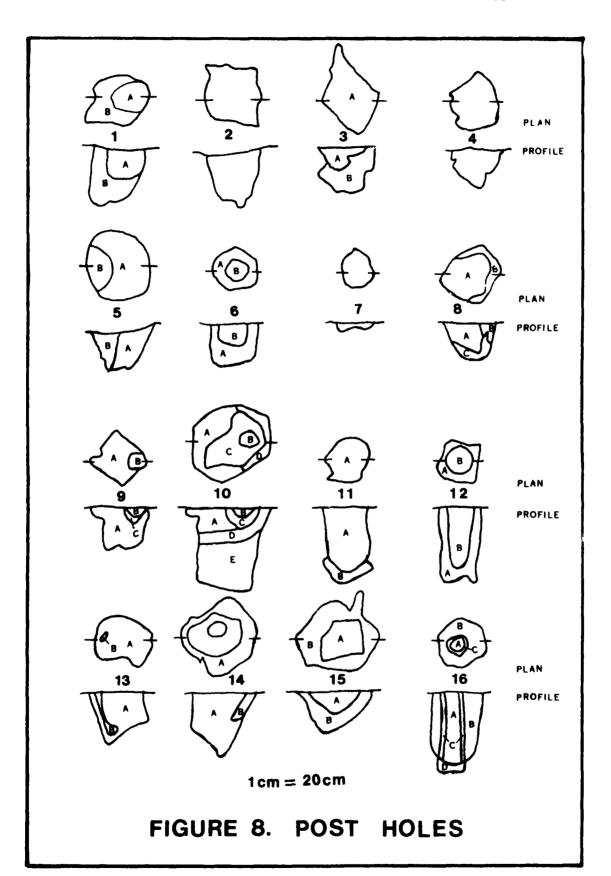
This post hole measured 35 x 32 cm at its top and contained a central post mold 12 cm in diameter. The post mold, Fill A, was brown sand and extended to a depth of 33 cm. Fill B was the main fill of the post hole and was a mottled, light and dark brown sand. Immediately under the post mold was Fill C, a white sand. Material from the fill included sand tempered sherds, debitage, and ferruginous sandstone fragments.

The locations of the post holes are shown in the Feature Map (Fig. 3). One possible post hole pattern is indicated by post holes 1, 2, 3, 10, 11,13, and 16. These posts are alligned in an almost perfect rectangle measuring 9 x 2 meters (30 x 6 feet). Four post holes were distributed at intervals of 3 m along the south side of the pattern Only three post holes were recognized on the north side, but if a fourth was present midway between post holes number 13 and 16, the exact spacing present on the south side was duplicated on the north. This pattern could possibly represent the supporting framework for a tent, or could have been the main supports for a wooden building.

\* indicates post holes which were not fine screened

TABLE 4. ARTIFACTS FROM POST HOLES

Total	'n	ი დ	62		22	6 4 79 363	89	619
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Post Hole Number	CERAMICS Limestone Temper	Ferruginous Sandstone Temper Eroded	Sand Tempered Cord Marked Eroded	CHIPPED STONE ARTIFACTS	Biface Fragment Utilized Flakes	DEBITAGE Primary Decortication Flakes Secondary Decortication Flakes Shatter/Chunks Biface Thinning Flakes Large Flakes Small Flakes	MISCELLANEOUS ROCK Ferruginous Sandstone Fragments	Total



#### IV. CULTURAL MATERIAL

#### Lithics

A large sample of stone tools and debitage was recovered during the course of excavation activities at L.A. Strickland. These artifacts were derived from surface collections, test excavation units, and the features exposed by the stripping of the plowzone. The variety of tool types or functional categories is restricted to flaked or chipped stone tools and quartz pebbles altered by use. An assortment of burned sandstone fragments showing no deliberate alteration was also found.

Most of the stone from L.A. Strickland that was suitable for knapping was subjected aboriginally to heat treatment or thermal alteration to enhance its flaking quality. Generally, this process alters the color of the stone, frequently changing yellows and browns to various shades of red. Surfaces exposed by flaking after heat treatment are waxy and lustrous (Crabtree 1972: 4-5). Due to the lack of experimental comparative samples of local cherts subjected to thermal alteration, no specific observations or analyses of the percentages and types of artifacts treated by heating is advanced, but based solely on considerations of color and luster it is estimated that about 75% of the chipped stone assemblage shows evidence of heat treatment.

While chert cobbles or pebbles provided the raw material from which most of the chipped tools were made, well indurated conglomerate and ferruginous sandstone were used in several cases. The chert recovered from L.A. Strickland is presumed to be from the Tuscaloosa formation, a source of gravel and sand in the Tennessee-Tombigbee Divide Hills. A few specimens of blue-gray Fort Payne chert from the Tennessee drainage were also encountered.

Several of the tool categories defined below reflect a tentative model of the sequence of activities involved in the production of chipped stone projectile points and biface tools at 22TS765. According to this model, in the initial stages, a cobble was selected, tested for quality, and reduced to a rough bifacial preform. More carefully executed knapping followed, until the preform's blade was thinned and its edges smoothed. Commonly referred to as a blank at this stage, an artifact might then be notched or stemmed to facilitate hafting. Its edges were sometimes further refined by delicate pressure retouch. Tools other than projectile points were also made following the initial

steps of projectile manufacture, but with less attention to weight and symmetry. A high degree of refinement in the finished implement was also not always necessary. A consequence of this total reduction system was an abundance of lithic debris or debitage, consisting of chunks, shatter, a variety of flakes, and, of course, fragments of semi-completed tools. The byproducts were used, with or without retouch, for a wide variety of essential cutting, scraping, and penetrating operations. The types of utilization of these and other tools are clues to the subsistence of the people who made them and keys to explaining their occupation of an archaeological site.

Applying this model to the chipped stone artifact typology, the following categories were used:

Projectile Points (Plate VII A-G). Items assigned to this category represent stemmed and non-stemmed, well flaked, biface artifacts commonly regarded as the penetrating tips of atlatl darts and arrows. Fragments consistent with the degree of thinning and surface refinement of completed projectile points were also included within this grouping. With the exception of distal end and midsection fragments, all artifacts in this category are described below and are pictured in Plate VII. Provenience and metric data are provided in Table 5.

Specimens A-B These artifacts seem to best correspond to the type designated as Flint Creek (Cambron and Hulse 1964: 44). Both have straight blade edges and expanding stems and possess finely retouched blade edges; A is serrated. The shoulders of A are horizontal; B has poorly defined tapered shoulders. Cambron and Hulse assign the Flint Creek type to the Late Archaic through Early Woodland periods.

Specimen C The blade of this straight stemmed point is slightly asymmetrical, one edge being essentially straight and the other excurvate. The stem is broader than it is long, and the shoulders are tapered. The blade edges have been retouched. Oakley and Futato (1975:Plate XXIV E) illustrate an artifact which they term a Kays point that is similar to Specimen C in size and form. This artifact, which was recovered from Feature 72 at the Dam Axis site, was associated with Alexander series and limestone tempered ceramics, suggesting a Middle Woodland association for this specimen.

Specimen D This specimen is a basal fragment of a crude, medium sized broad stemmed point. Flaking is random with large flake scars. The raw material is of poor quality. This point is probably a stemmed preform broken during thinning. No cultural or chronological assignment is advanced.

Specimen E This artifact probably represents the distal end of a projectile point that was restemmed, the stem base preserving the

TABLE 5. PROJECTILE POINT PROVENIENCE AND METRIC DATA\*

Specimen	Provenience	Length	Thickness	Shoulder Width	Basal Widtn	Stem Length
A	Feature 3	ł	12	28	14	14
8	Feature 1	;	6	18	16	8
ပ	Surface	44	σ	23	19	12
Q	Feature 3	1	14	35	20	13
ш	Surface	35	7	20	∞	80
Ľ.	Surface	44	6	21	80	8
9	Surface	!	ય	;	&	;

\*All measurements rounded to nearest millimeter.

original snapped surface. An attempt has been made to thin the stem on one side to reduce the excessive thickness, but lack of proper platform preparation has caused the thinning flakes to hinge off approximately 4 mm above the base. The shoulders of the point are tapered and its edges have been finely retouched but not serrated.

Specimen F This is a straight stemmed point with an excurvate blade and poorly defined tapered shoulders. The flake scars are large and randomly distributed. This point is unclassified and is listed in the tables as Previsional type (P-1).

Specimen G This small, triangular point conforms well to the Madison type. The base is slightly incurvate and the blade edges are essentially straight. In the Tombigbee River Valley, the Madison point is associated with both the Late Woodland (Miller III) and Mississippian periods. The early introduction of the type into the region seems to be documented by its association with a radiocarbon date of A.D. 530 from the Cofferdam site (Blakeman and others 1976: 43). Considering the radiocarbon dates of A.D. 560 + 75 and A.D. 715 + 90 from Features 1 and 3 at 22Ts765, it is entirely possible that this Madison point is associated with the late Middle Woodland occupation.

Preforms (Plate VII H-I, VIII F) This category contains incompleted artifacts in which the knapping proceeded to the extent that much of the cortex of the cobble was removed and the major axis of the implement is apparent. Bifacial edges are developed, but are formed by large, irregular flake scars.

Blanks Artifacts regarded as intermediate between the preform and the completed projectile point were incorporated into this category. These items are well shaped, with smoother bifacial edges and less random flaking than preforms. Their size and thickness approximates that of completed projectile points.

<u>Biface Fragments</u> Contained in this category are sections of biface artifacts which were considered too fragmentary to permit confident description as blanks, preforms, or projectile points.

Gravers (Plate VIIIA-B) Gravers are flakes, chunks or other artifact fragments on which a small projection was flaked. The function of these artifacts is presumed to have been delicate or precision scribing or incising.

Notches Notches represent a special category of a touched flakes in which the functional edge is curved or semicircular. Using the ventral face as a platform, flakes were detached from the dorsal side to produce a strong working edge. Notches are suitable for reducing the diameter of lengths of bone or wood.

Retouched Flakes (Plate VIIIC-E) This category represents debitage with deliberate, retouch flaking to create or enhance a functional edge. While retouch can be directed along a suitable edge on almost any flake, usually flakes with wider, thicker distal ends were selected. Using the ventral face of the flake as the platform side, small flakes were detached from the distal end. The resulting edge was steep, strong, and well suited for scraping hides as well as harder materials like wood and bone.

<u>Utilized Flakes</u> Artifacts contained within this category are the product of the use of debitage to perform different cutting or scraping tasks without deliberate alteration of the functional edge. Such use is detected by small flakes or scratches along one or more edges of the flake.

<u>Pebbles</u> This is any small unmodified, rounded rock with a cortical surface formed in an alluvial context.

Tested Pebbles (Plate VIII G) Chert pebbles or cobbles from which a small portion of the cortex was removed without any further attempt to produce a functional edge were placed in this category. These artifacts presumably document an initial step in the knapping sequence in which a cobble is test flaked to assess the quality and homogeneity of the chert (Crabtree 1972:8; O'Hear and Knight 1975: 49).

Cores (Plate VIII H) Included in this category are large, randomly flaked chert objects which are characterized by little shaping or thinning. Most of the cortex has been removed. The flake scars are exceptionally large, irregular, and probably produced by primary decortication.

<u>Primary Decortication Flakes</u> This distinctive flake type is the product of the initial stages of the removal of the cortex or weathered surface of a chert cobble. For the purposes of this analysis, primary decortication flakes are defined as flakes exhibiting cortex on 75% or more of their dorsal surface.

Secondary Decortication Flakes Flakes with less than 75% of their dorsal face retaining cortical surface, were placed in this category.

Biface Thinning Flake Biface Thinning Flakes document the advanced stages of biface manufacture in which the removal of flakes is primarily directed toward reducing the thickness of the tool. These flakes are recognized by the preservation of a small protion of the obverse face of the artifact on the detached flake.

<u>Large Flakes</u> This category includes all chert chipping debris which is not contained within the above types. The specimens exhibit no cortical surface, no retouch or utilization wear and none of the attributes of biface thinning flakes. These types of flakes are

variously referred to in other reports as "flat flakes", "unmodified flakes" or simply "flakes". They are termed Large Flakes to distinguish them from the small flakes recovered from 1/16 in screened provenience units.

Small Flakes Numerous small flakes were found in the 1/16 in screen fractions from features and post holes. These flakes were counted, but no attempt was made to classify them into types. Most appear to be small pressure flakes or broken fragments of flakes.

### Other Lithic Artifacts

Hammerstones These are medium sized pebbles, usually quartz, which show battering along the edges or ends (Plate VIII I).

<u>Ferruginous Sandstone Fragments</u> Irregular fragments of ferruginous sandstone were found in most excavation units. This material originates as lenses and beds in the Tuscaloosa formation and was transported to the site. Most of the sandstone is reddened and cracked by heating and it is likely that most of this material was used as rock for hearths or for indirect heat cooking.

The frequencies and distribution of the different categories of lithic artifacts are presented in Tables 1, 2, 3, and 4.

#### Ceramics

The primary difficulty in discussing the ceramic assemblage from the L.A. Strickland I site is the very poor state of preservation of the sherds. The highly acidic soils of the area and perhaps other factors resulted in most of the sherds being very soft, friable, and generally eroded. Of the 567 sherds recovered from all contexts, 391, or 70%, were eroded past the point where surface treatment or even rim form could be adequately discerned. Sherds from feature contexts fare better than those from the surface, post holes, or excavation units, but even these could not be adequately washed for fear of removing the surfaces and rounding the edges.

All of the ceramics from the site are sand, limestone, or crushed ferruginous sandstone tempered. Each of these temper groups is described below.

# <u>Limestone Tempered Ceramics</u>

Twenty limestone tempered sherds were found at the site; one each from Features 3 and 5, Post Holes 11, 14 and 15, Squares 522R562 and 521R562, and 13 sherds from Feature 1. All of the sherds are plain and conform to the type Mulberry Creek Plain as described by Haag (1942:516). The sherds from Feature 1 all appear to be from the same

vessel. No rim sherds are present, but a flat vessel bottom with four podal supports could be reconstructed from sherds in Zone A of Feature 1 (Plate IX A). The square base is 7 cm from side to side and the podal supports at each corner are 2 cm in diameter and 7 mm high. The supports seem to have been worn by use.

The deep, tetrapodal beaker suggested by the sherds from Feature 1 is similar to other limestone tempered vessels from the western Tennessee valley area, and the vessel form is found in Early to Middle Woodland contexts throughout the Southeast.

### Sand Tempered Ceramics

Most of the sherds (482 or 87%) from the L.A. Strickland 1 site are tempered with fine sand. The 55 cord marked sherds all fall within the type Furrs Cord Marked, originally defined by Jennings (1941: 199) and well known since then from sites all along the Tombigbee drainage. No large sherds of Furrs Cord Marked were recovered, and the few rim sherds are all straight. About half of these have a small, plain fold to the exterior. Details of the pattern of cord marking on the sherd exterior are eroded, but the marking appears to be random and overlapping with a range of cord sizes. One body sherd has a biconical mending hole drilled through it. Examples are illustrated in Plate XD-F.

A single, small rim sherd of sand tempered, pinched ware was found in Feature 5, which also contained a large amount of modern material. The paste of the sherd is more granular than that of the other sand tempered ceramics from the site and appears to be similar to Alexander Series Ware. The sherd is probably Alexander Pinched (Haag 1942: 515). The small size and eroded condition of the sherd makes any assignment tenuous.

The plain sand tempered sherds all conform to the type Baldwin Plain as defined by Jennings (1941: 200) and further described by Cotter and Corbett (1951: 17). Seventy-three sherds, 9.9% of the total assemblage, are Baldwin Plain. Most of these sherds are small and eroded. Of the two rim sherds recovered, one (Plate IXB) is a large sherd from a small globular bowl with a straight rim showing coil fractures immediately below the rim but not farther down the body. The other is a straight rim with a slight exterior fold. Badly eroded, sand tempered sherds comprise the largest group of ceramics from the site. It is unfortunate that 354 sherds, or 64% of the total assemblage, can be classed only as eroded. All of these sherds are small and many are very small (less than 1 cm square). No rim sherds could be recognized and nothing can be said of vessel shape. It is probable that most of the eroded sherds were plain, but a number may have been cord marked at one time.

## Ferruginous Sandstone Tempered Ceramics

A number of sherds recovered from Feature 1, Feature 3, and Post Hole 10 have crushed fragments of red ferruginous sandstone included in the sandy paste presumably as a tempering material (Plate XA-C). Under microscopic examination, the sandstone inclusions appear identical to the ferruginous sandstone fragments found throughout the site. This sandstone occurs locally as lenses within the Tuscaloosa formation. The sandstone chunks range from 0.5 mm to 3.0 mm in size. The paste is very friable with a large amount of small sand and is very sandy to the touch. Sixty-five sherds (14%) were found, of which 28 (5% of the total ceramics) are cord marked. Again, it is likely that sherds in the eroded category, which includes all of the non-cord marked sherds, were actually plain, but this determination could not be made accurately.

All of the ferruginous sandstone tempered cord marked rim sherds are straight, with a pronounced pinched or evenly cord marked fold to the exterior. One example from Feature 1 has a cord marked strip appliqued below the rim. Cord marking on all of the sherds appears to be random and begins immediately below the rim. A fragment of a rounded, molded base was also recovered from Feature 1.

#### Historic Artifacts

A variety of historic artifacts was thinly scattered over 22Ts765. The greatest concentration occurred adjacent to the railroad embankment. It is believed that the railroad camp occupation is responsible for the bulk of the recovered historic artifacts. A description of this material is provided below and in Table 6.

Glass Glass fragments accounted for the largest proportion of the historic material recovered. Eleven bottle and lip sections were included that represent two closure types. Ten of these bottlenecks were designed to accommodate cork stoppers. The seam marks on their lower surfaces indicate that the lips were applied after the body section of the bottle had been formed in a mold. The one neck designed to accept an external screw stopper has seams extending completely across the bottle's lips (Plate IX A-E, G-H).

A fragment of the embossed side of a molded panel bottle was found on the surface of the site (Plate XI F). The 2-line block letter raised legend reads "-umberland MFG.-, -NASHVILLE, TEN-." The Cumberland Manufacturing Company is still in business, and a call to their sales manager, Mr. Jack Shepard, yielded little in the way of positive information. Mr. Shepard said the company was founded in 1898 in Chattanooga and moved to Nashville in 1902. The company has never made their own bottles. This type of bottle was used for bottling a variety of products including a number of extracts. The company does

TABLE 6. HISTORIC ARTIFACTS

Total	10 1 21 152	-22		4 to	m	7	~	100	7	21 2 1 1 23 1	369
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Provenience Unit Level/Zone	Softle Fragments, clear to amethyst Necks and Lips, cork closure Necks and Lips, screw cap closure Bases and Bottoms	tle Fragments, aquamarine Necks and Lips, cork closure Bases and Bottoms Other	its, blue		ents :ss	iss Fragments yst			neware Brown exterior glaze Broan interior and exterior glaze	agments, round in fragments	ict s
Type of Material	Glass Bottle Fragments, cla Necks and Lips, co Necks and Lips, so Bases and Bottoms Other	Bottle Fragments, aquamarine Necks and Lips, cork close Bases and Bottoms Other	Mason Jar Fragments, blue Base or Bottom	Milk Glass Decorated Undecorated	Plate Glass Fragments 1/4 in thickness	Miscellaneous Glass Fragments Clear to amethyst	Amber Glass	Ceramics White Earthenware	Stoneware Brown exterior glaze Broan interior and ex	Hetal Iron Nails and fragments, round Iron Nuts Iron Bar Iron Strap Hinge Hiscellaneous Iron fragments Brass Oiler	Miscellaneous Artifacts Coal Lumps TOTAL

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not maintain a collection of bottles except for a few that Mr. Shepard has picked up at flea markets and antique stores (Jack Shepard, Personal Communication).

Only 19 glass fragments did not represent bottles. Among these were three pieces of 1/4" thick plate glass, one blue mason jar bottom, and six fragments of milk glass, one of which was embossed with a design that could not be interpreted due to the small size of the fragment. An additional seven fragments of embossed glass could represent cups, dishes, bowls, or glasses.

Ceramics A total of 108 historic sherds were recovered. Of this total, 100 pieces were plain white earthenware. Four of these were decorated: two with a brown transfer floral design, one with a green transfer floral design, and one fragment with a green and pink rosebud motif (Plate XI I-L). The remaining specimens of historic ceramics were fragments of stoneware vessels with a brown glaze. On seven of the fragments the glaze was restricted to the external surface. On one fragment the glaze was applied to the interior surface as well.

Metal Artifacts A total of 51 metal artifacts were recovered. Of these, 21 were round nails or nail fragments and another 25 were unclassifiable iron fragments. An iron strap hinge and iron bar were found, as well as two iron nuts measuring 45x40x23 mm, one of which was attached to a 30 mm length of iron shaft 25mm in diameter.

A brass oiler bearing the inscription "Patented, Swift Lubrication Co., Elmira, N.Y. U.S.A." was exposed during the stripping of the plowzone. This device was a cylinder approximately 10 cm in length with three openings at one end and an adjustable screw valve at the other. The function of such an apparatus is to provide a controlled drip of lubricant for different types of equipment.

<u>Miscellaneous</u> Besides the artifacts mentioned above, four pieces of anthracite coal were recovered and are believed to be associated with the historic occupation.

#### V. RADIOCARBON DATES

Three radiocarbon dates were run on samples from the L.A. Strickland I site. One sample from each of the three aboriginal pits was submitted to the University of Georgia Geochronology Laboratory for analysis. From their similar artifact contents and their clustered arrangement within the site, it was felt that a tight sequence of dates on what is believed to be an essentially contemporaneous set of features would be received. However, from the date summaries listed in Table 7, it can be seen that our optimism was premature. The table lists the dates both in uncorrected radiocarbon years as received from the lab, and also after correcting for a) the actual 5730 year half life of carbon 14 versus the 5568 year half life used in the laboratory calculations, and b) for the long and short term fluctuations in the Carbon 14 to Carbon 12 ratio as given by Damon and others (1974). With these corrections the dates more closely approximate the true age in calendar years.

The date from Feature 2 (UGA 1433) is widely at variance with the dates from the remaining two features. While the small size of the sample submitted could account for the large standard deviation, the 500-year difference between the mean date of the Feature 2 sample and the earliest of the other two dates is unusual. This date is regarded as unreliable due to unknown factors.

The dates from Feature 1 and 3 overlap only 21 years in the 1 standard deviation range. The arithmetic mean of these two dates, using the corrected dates, is A.D. 638. Perhaps a more accurate measure of the actual date for these two features is a weighted average as suggested by Long and Rippeteau (1974). This weighted average contrasts with the arithmetic mean in that the relative precision of the individual determinations, as represented by the associated standard deviation, tempers the mean date toward the more precise of the individual dates averaged. The weighted average of the dates from Features 1 and 3 is A.D. 644 + 62 years, which we assume to be the best estimate for the true age of the features.

The relationship of the artifact assemblages and the radiocarbon dates from the L.A. Strickland I site to the archaeology of the region will be discussed in Chapter VI.

TABLE 7. RADIOCARBON DATES FROM THE L.A. STRICKLAND I SITE

Corrected Date B.P. A.DB.C.	5 B.C.	740 A.D.	580 A.D.
Corrector B.P.	1955 <sup>±</sup> 262	1210+103	1370+ 78
Uncorrected Dates B.P. A.DB.C.	5 A.D.	715 A.D.	560 A.D.
Uncorrec B.P.	1945 <sup>±</sup> 260	1235+ 90	1390- 75
Type of Material	eature 2 Wood Charcoal	Wood Charcoal, Hickory Nutshell	Wood Charcoal Hickory Nutshell
Provenience	Feature 2	Feature 3	Feature 1
University of Georgia Sample Number	1433	1434	1435

#### V. SUMMARY AND CONCLUSIONS

Archaeological investigations at the L.A. Strickland I site have shown that the site area has served intermittently as a camp through a long period of time for some very different purposes. A few projectile points suggest that the site was at least visited during the Archaic period, but the major prehistoric occupation dates to the latter part of the Middle Woodland, Miller II period. The next occupation was about 1905 when the site was used as a railroad camp during construction of the Illinois Central railroad line immediately adjacent to the site. The components are discussed in more detail below.

# The Archaic Component(s)

Projectile points from the surface of the site indicate some use of the site during various segments of the Archaic period. The earliest point is representative of the later, larger forms of the Kirk-Kanawha cluster of Early Archaic projectile points. This large, corner notched point with a slightly bifurcate base was found by the University of Mississippi survey and is illustrated in Thorne (1976, Plate 38 B). The point probably dates to approximately 7000 to 6000 B.C.

A later Archaic component is suggested but not confirmed by stemmed points found during our investigations (Plate VII D) and the original survey (Thorne 1976, Plate 38 C).

## The Middle Woodland, Miller II Period Component

The major prehistoric component at the L.A. Strickland I site was a small Miller II period occupation. The primary set of data gathered consisted of the three aboriginal pits described above. While artifacts attributable to the Miller II period were found in almost every excavation unit, all of these artifacts were contained in the plowzone except for the samples from the tenuous stratigraphic sequence in squares 522R562 and 521R562. Therefore, the following discussion will focus on the form and content of the three pits.

Two distinct types of Miller II pits seem to be represented. Features 1 and 2 share a number of common attributes and are different in form and content from Feature 3. One side of both Features 1 and 2 is nearly vertical, while the opposite side and bottom slope gently to the other side of the pit. The form suggests that they were excavated with a hand held digging tool and that little attention was given to the overall form of the pit. As the side of the pit opposite the excavator was cut back by more or less vertical slicing, the soil

removed was scooped or dragged out of the pit excavation on the side towards the excavator.

The form of Feature 3 suggests that a greater effort was made to make the pit symmetrical. All of the pit walls slope evenly to the flat bottom, and the pit seems to have been shaped to a specific form, rather than having a form resulting solely from the processes of excavation as hypothesized for Features 1 and 2. The two sets of pits also contrast in their contents. Features 1 and 2 both contained two distinct fills: a dark brown "midden" fill and a fill of yellowish sand with few artifacts. The "midden" fill in these pits contained large fragments of charcoal in addition to small flecks scattered all through the soil. The fill from Feature 3 was homogeneous throughout, containing no large fragments of charcoal, but otherwise resembled the "midden" fills in Features 1 and 2. Feature 3 was apparently filled all at once.

The following scheme is suggested by the form and contents of the pits: Features 1 and 2 are interpreted as open pit hearths which were roughly excavated as they were needed. The presence of the different fills indicates that more than one process was involved in their ultimate filling. Feature 3 seems to have been constructed for a single, specific task, with the form being dictated by the requirements of the task and the feature being filled in a single operation when the task had been completed. One interpretation is that Feature 3 is an earth oven used for cooking a single lot of food by the indirect heating method.

All of the evidence from the Miller II occupation suggests that the site was occupied for a relatively brief period of time and that the group using the site was not large. While there are differences in the ceramic assemblages from the individual pits, such as the absence of limestone or ferruginous sandstone tempered pottery in Feature 2, the differences in the samples are not so large that these variations cannot be attributed to sampling error and to differences in the events and processes leading up to the filling of the individual pits. The tightly clustered arrangement of the three pits, the absence of any traces of substantial Miller II dwellings, and the general scarcity of Miller II artifacts at the site all argue for a single, probably seasonal, occupation of the site, or perhaps a few consecutive seasonal visits.

The limited classes of chipped stone tools recovered suggest that the range of activities on the site was somewhat restricted, although the possibility that many artifacts were multifunctional cannot be discounted. The chipped stone assemblage is most indicative of the procurement and processing of game, and the production and upkeep of tools associated with these activities. The types of debitage recovered indicate that people remained on the site long enough to necessitate replacement of tools in their kit, as well as routine maintenance of

tools brought on to the site. There are no examples of tools which can be specifically associated with the processing of vegetable foods. It is possible that some of the ferruginous sandstone fragments found could be the remains of mortars, mullers, etc., and it is also probable that perishable items such as baskets, wooden mortars, etc., played a major part in the plant processing system.

In discussing the chronological and cultural position of the Miller II component at 22Ts765, it is assumed that the assemblage is representative of the non-perishable artifact forms used by a particular, small group of people for a short period of time. This period of time, even though it may be 20 years in length, can be considered an "instant" of archaeological time in relation to the precision of the dating techniques available. Using the radiocarbon dates from Features 1 and 3 discussed in Chapter II, this "instant" of time falls between A.D. 580 and A.D. 740, with the best approximation of the true date being A.D. 644  $\pm$  62 years.

Summarizing the ceramic assemblage described in Chapter IV, the non-eroded component of the total assemblage consists of a majority of sand tempered wares of the types Furrs Cord Marked and Baldwin Plain. Present in lesser but significant amounts are the limestone tempered type Mulberry Creek Plain and ferruginous sandstone tempered, cord marked type. The projectile point type associated with this ceramic assemblage is the Flint Creek point, two of which were found in the features.

How does this dated assemblage fit into the outline of the prehistory of the area as it is presently conceived? Before this can be discussed, a brief outline of the Middle Woodland period chronology for the area is necessary. A detailed discussion of the chronologies for the Tombigbee drainage and the northeast Mississippi area would take many pages and is beyond the scope of this report. The reader is referred for this to two recent syntheses—Blakeman, Atkinson and Berry (1976) and Jenkins (1975)—based on work done in the central Tombigbee valley.

In brief, the time between about 100 B.C. and A.D. 900 has been divided into three periods, based primarily on pottery assemblages and on specific changes in the frequency of a number of pottery types through time. These periods are Miller I, Miller II and Miller III, originally defined by Jennings (1944) on the basis of work done in the Tupelo, Mississippi area. Since then, the chronology has been revised and strengthened by data from the Bynum Mounds (Cotter and Corbett 1951) the Pharr Mounds (Bohannon 1972), and the two syntheses mentioned above. While there is considerable disagreement about the details of the sequence, the major tripartite division is generally accepted.

As things stand at the present, the Miller I period spans the time from roughly  $100\ B.C.$  to A.D.  $300\ and$  encompasses the early part of

the Middle Woodland culture when most groups of the Eastern Woodland area were actively participating in the elaborate Hopewellian ceremonial-mortuary system. Both the Bynum and Pharr mounds are burial mounds containing a wide range of exotic goods associated with that cultural system. The local ceramics of the period were predominently sand tempered, the types Saltillo Fabric impressed and Baldwin Plain being the major constituents of the assemblages, with Furrs Cord Marked present in minor amounts.

The break between the relatively well documented Miller I period and the poorly understood Miller II period is somewhat arbitrary and is based on an increase in the quantity of Furrs Cord Marked pottery relative to the Saltillo Fabric Impressed. Miller II is defined by Jenkins (1975: 186-188) as follows:

It is proposed here that ceramically the Miller II Phase is defined as beginning when both Baldwin Plain and Saltillo Fabric Im, ressed start to decline in favor of Furrs Cord-marked.... It could be more accurately stated that the Miller II Phase began between A.D. 200 and A.D. 300. The suggested terminal date for this phase is approximately A.D. 500.

Jenkins also suggests that limestone tempered ceramics are an integral part of the Miller II ceramic complex in the upper Tombigbee drainage.

The Miller III period ceramic complex was radically different from that of the preceding two periods in that the pottery is tempered with clay particles or grog, not sand. Previous estimates of the age of Miller III place it roughly from A.D. 500 to A.D. 900. The Cofferdam Phase was defined (Blakeman, Atkinson and Berry 1976) in the central Tombigbee valley for the earlier part of the Miller III period. Miller III ceramics assemblages are dominated by the types Tishomingo Plain and Tishomingo Card Marked.

Considering the artifact assemblage and radiocarbon dates from the L.A. Strickland I site with this rough chronological outline in mind, it appears that the site dates to the very latest part of the Miller II period. First, the complete absence of any of the Late Woodland, Miller III, clay tempered ceramics of the Tishomingo series or the closely related McKelvey series of the Tennessee Valley indicates that the site is well within the Miller II period. The complete absence of the sand tempered type Saltillo Fabric Impressed can be taken as an indication that the site is very late in the Miller II period since that period is defined on the basis of decreasing amounts of Saltillo. One of the most interesting implications of the ceramic assemblage is that the radiocarbon dates show that limestone tempered pottery, basically a Tennessee Valley type which is often present in Miller II assemblages in northeast Mississippi, is present throughout the Miller II period to a date of A.D. 640. This is at least 100 years longer than

most previous estimates for the terminal date for the limestone tempered ceramics, which generally are associated with the Middle Woodland Copena culture in the Tennessee Valley (Walthall 1972).

A review of the literature shows that the L.A. Strickland I site dates are not the only late dates on limestone tempered pottery from the northern Alabama and Mississippi area. At Site 1Fr507 in the Bear Creek watershed, approximately 40 air miles from the L.A. Strickland I site, Oakley and Futato (1975: 154) report a date of A.D. 695  $\pm$  190 (GX-3337, uncorrected) on charcoal from a pit containing primarily Mulberry Creek Plain sherds with podal supports, some plain sand tempered sherds, some fortuitous fiber tempered sherds, and a Flint Creek type projectile point. This assemblage is directly comparable to the assemblage from the L.A. Strickland I site.

At the Vaughn Mound (22Lo538), an accretional Archaic period mound on the Tombigbee River near Columbus, Mississippi, an intrusive pit containing Baldwin Plain sherds, four Mulberry Creek Plain sherds, and one sherd each of Marksville Incised, Coles Creek Incised and O'Neal Plain was dated at A.D.  $665\pm90$  (Atkinson 1976: 129). Marshall (1974: 22) has previously noted the persistence of limestone tempered ceramics in northeastern Mississippi and adjacent portions of Tennessee and Alabama, and this trend might be more widespread. What may be indicated is the continuation of the limestone tempering tradition after the extinction of Copena-Hopewellian mortuary ceremonialism.

In summary, the data from the L.A. Strickland I site indicate that some revisions in the terminal date for the Miller II period are necessary, and that these revisions could have impact on the Middle Woodland to Late Woodland boundary in northwest Alabama and northeast Mississippi. On the basis of radiocarbon dates from the site, augmented by the other dates from 1Fr507 and the Vaughn Mound, it would seem that the terminal date for Miller II in the Tombigbee drainage, and for the limestone tempered series in the Tennessee Valley should be extended from the present estimate of A.D. 500 to between A.D. 650 and A.D. 750. This change would produce a corresponding change in the span of the Late Woodland Miller III period and the allied McKelvey ceramic series.

The Middle Woodland occupation at L.A. Strickland I can probably be described as a temporary, autumnal foraging camp. Presumably, such small camps were associated with larger base camps where moderately large populations were concentrated when certain abundant food resources, such as the nuts of oak, hickory, and walnut trees, became seasonally available. As the resources surrounding the base camp were exhausted, subsistence pressures forced the dispersal of primary social groups into more remote areas. This is the centrally based wandering strategy which has been hypothesized (Beardsley 1955: 138) for Late Archaic-Transitional Early Woodland cultures in the southeastern United States. The role that incipient agriculture may have played during the Middle Woodland period in the Tennessee-Tombigbee Divide Hills is unknown, as

are the effects it might have had on a centrally based wandering settlement pattern.

Sites similar to L.A. Strickland I are probably located at suitable points along the many small streams that dissect the Tennessee-Tombigbee Divide Hills. The factors dictating settlement along these streams have been presented in the environmental section and the Appendix. These include convenient access to water, the floral and faunal diversification associated with stream meandering, and the association of the most desirable mast producing trees in the mesic slope and bottom zones of the region. Presuming the association of base camps with the environmentally richest areas, seasonal foraging was probably directed upstream in pursuit of sparser but still unharvested resources.

Investigation of the L.A. Strickland I site has provided limited information pertaining to the geographical and seasonal aspects of one segment of late Miller II settlement-subsistence systems. The data has indicated that portions of the uppermost drainages of small creeks were visited by small groups in the early fall. Botanical remains indicate the exploitation of nut foods and the fruits of sub-climax species. The types of artifacts recovered suggest the presence of both sexes: an occupation by primary social groups is clearly possible. However, no positive information was obtained concerning the activities and location of these groups at other periods of the year.

# The Historic Component: The Railroad Camp Occupation

A recent occupation of 22Ts765 is evidenced by the metal, glass and modern ceramics recovered from the surface of the site and from Feature 5. Although the artifacts themselves do not provide a precise identification of the nature of the occupation, information obtained from a local informant has been helpful in that regard. According to a Mr. Gentles of Paden, Mississippi, the area was the location of a railroad camp ca. 1905-1907, and the site is locally referred to as the "camp." As a child, Gentles visited the camp to see his father, a worker there, but could not recall specific details pertaining to the camp layout or facilities (S. A. Gentles, 1976 Personal Communication).

An attempt was made to obtain documentary evidence concerning this camp from the Illinois Central Railroad, but company records of that period no longer exist. Corroborating information may have existed in early issues of the Videt, a Tishomingo County newspaper, but its warehouse was destroyed by fire in 1948. In the absence of historical documentation, the description of the camp is limited to the artifacts and features identified by the archaeological work at the site.

Two features seem to be clearly associated with the historic occupation, but are not in themselves indicative of specialized railroad activities. The round nails and molded bottles with applied tops are consistent with an occupation after 1900, thus generally supporting Gentles' statement of the age of the camp. A structure related to the camp seems indicated by the pattern of Post Holes 1, 2, 3, 10, 11, 13 and 16.

While the details of the railroad camp occupation are not known, the economic role and the ecological consequences of the railway are better understood. As the extensive tracts of eastern white pine began to be exhausted at the end of the nineteenth century, the pine forests of the southern United States became the focus of the nation's lumber industry (Harrar and Harrar 1962: 54). Along the Culf Coastal Plain the longleaf pine forests could be easily logged. However, in rugged areas like the Tennessee-Tombigbee Hills the harvesting of timber was generally unprofitable. It was only along railroad lines that timber could successfully be marketed. The Illinois Central line which traverses Tishomingo County and runs within 100 meters of 22Ts765, cut through large tracts of virgin shortleaf and yellow pine and was associated with their exploitation (Dunston 1910: 11-12). It is somewhat ironic, therefore, that evidence pertaining to the first episode of man's extensive modification of the environment of the Tennessee-Tombigbee Hills area was uncovered as a consequence of activities involved in a second episode of modification, the construction of the Tennessee-Tombigbee Waterway.

## **Conclusion**

It is hoped that this report will add in some small way to a clearer picture of the prehistory of the area to be affected by the Tennessee-Tombigbee Waterway. In the authors' opinion, the major contribution of the project was to recover a well dated, tightly controlled sample of late Middle Woodland materials which will be of use to future researchers in the Tennessee-Tombigbee divide area. It was also of considerable interest to us to recover some data on the early twentieth century expansion of the railroads.

The specimens and information resulting from the excavation of the L.A. Strickland I site could form a valuable part of an interpretive display about the prehistory and history of northeast Mississippi. An exhibit on the site would best be presented as a part of a series of exhibits illustrating the settlement-subsistence system of Middle Woodland groups and the manner in which this system was integrated with the natural environment. Artifacts, drawings and photographs from the site could be used to form a display showing how a small camp is represented archaeologically and how this type of site compares to other site types such as base camps, quarry sites and perhaps mound sites.

Specific items which could be included in the display are the projectile points; examples of unfinished tools, broken tools and waste material arranged to show the processes and craftsmanship of flintknapping; specimens of the larger pottery fragments with drawing reconstructions; and examples of charred botanical material from the site. Integrated with the specimens should be photographs, drawings and an explanatory text.

A similar exhibit could be prepared on the material from the railroad camp and could be used to illustrate some of the formation processes of the archaeological record by showing how a more familiar type of settlement becomes an archaeological site.

#### REFERENCES CITED

- Atkinson, James R.
  - Test excavations at the Vaughn Mound Site. In Archaeological survey and test excavations in the upper-central
    Tombigbee River Valley; Aliceville-Columbus Lock and Dam
    and impoundment areas, Alabama and Mississippi, Marc D.
    Rucker, pp. 115-158. Report submitted to the National
    Park Service, Atlanta, Georgia.
- Beardsley, Richard K.
  - 1955 Functional and Evolutionary Implications of Community Patterning. In Robert Wauchope (editor) "Seminars in Archaeology", 1955. Memoirs of the Society for American Archaeology. No. 11. Salt Lake City.
- Blakeman, C. H., J. R. Atkinson, and Gerald Berry
  Archaeological excavations at the Cofferdam Site,
  22Lo599, Lowndes County, Mississippi. Report submitted
  to the U. S. Army Corps of Engineers, Mobile, Alabama.
- Bohannon, Charles F.
  1972 Pharr Mounds and Bear Creek Site. National Park Service.
- Cambron, James W., and David C. Hulse
  1964 Handbook of Alabama Archaeology: Part 1: Point Types.
  Archaeological Research Association of Alabama.
- Coleman, James N.
  1975 Vegetation and floristic analysis of the Yellow Creek and Mackey's Creek drainage basins, Tishomingo County, Mississippi. M.S. thesis, University of Tennessee.
- Cotter, John L., and John M. Corbett
  1951 Archaeology of the Bynum Mounds, Mississippi. National
  Park Service, Archaeological Research Series No. 1.
- Crabtree, Don E.
  1972 An introduction to flintworking. <u>Idaho State University</u>
  <u>Museum, Occasional Paper</u> 28.
- Damon, P. E., C. W. Ferguson, A. Long, and E. I. Wallick
  1974 Dendrochronologic calibration of the radiocarbon time
  scale. American Antiquity 39, No. 2, Part 1: 350-66.

Dunston, C. W.

Forest conditions of Mississippi. Mississippi State Geological Survey, Bulletin 7.

Gentles, S. A.
1976 Personal Communication

Haag, William G.

A description and analysis of the Pickwick pottery. In An archaeological survey of the Pickwick Basin in the adjacent portions of the states of Alabama, Mississippi, and Tennessee, W. S. Webb and D. L. DeJarnette, Bureau of American Ethnology, Bulletin 192; pp. 509-526.

Harrar, Ellwood S., and J. George Harrar
1962 Guide to Southern trees. Dover Publications, Inc., New
York.

Jenkins, Ned J.

1975 Archaeological investigations in the Gainesville Lock and Dam Reservoir: 1974. Report submitted to the National Park Service, Atlanta, Georgia.

Jennings, Jesse D.

1941 Chickasaw and earlier Indian cultures of northeast Mississippi. The Journal of Mississippi History Vol. 3, No. 3: 155-226.

1944 Archaeological Survey of the Natchez Trace. American Antiquity 9: 408-15.

Kelley, Arthel

1974 Topography. In Atlas of Mississippi edited by R. D. Cross and R. W. Wales, C. T. Traylor, chief cartographer, 4-7. University Press of Mississippi, Jackson.

Long, Austin, and Bruce Rippeteau
1974 Testing contemporaneity and averaging radiocarbon dates.

American Antiquity 39, No. 2, Part 1: 205-15.

Lowe, F. N.
1921 Plants of Mississippi. Mississippi State Geological
Survey, Bulletin 17.

Marshall, Richard A., and John T. Glover
1974 Archaeological survey of Tishomingo State Park and environs, Tishomingo County, Mississippi. Report submitted to Mississippi State Park Commission.

Miller, W. Frank
1973 An ecological study of the Tennessee-Tombigbee Waterway.
Report submitted to the District Engineer Mobile
District, U. S. Corps of Engineers by the Institute for
Environmental Studies, Mississippi State University

Oakley, Carey B., and Eugene M. Futato
1975 Archaeological investigations in the Little Bear Creek
Reservoir. Archaeology of the Bear Creek Watershed,
Vol. 1, Research Series No. 1. Office of Archaeological
Research, University of Alabama.

O'Hear, John W., and Vernon J. Knight, Jr.
1975 Archaeological investigations in the Rother L. Harris
Reservoir: 1974. Report submitted to the Alabama Power
Company.

Saltsman, E. J., and Ralph D. Cross
1974 Climate. In Atlas of Mississippi, edited by R. D. Cross and R. W. Wales, C. F. Traylor, chief cartographer, pp. 12-19. University Press of Mississippi, Jackson.

Shepard, Jack
1978 Personal Communication.

Thorne, Robert M.

1976 A cultural resources survey of the Divide-Cut Section,
Tennessee-Tombigbee Waterway, Tishomingo County,
Mississippi. Final report submitted to the National Park
Service, Atlanta, Georgia.

1976 Personal Communication.

U. S. Army Engineer District, Mobile
n.d. First supplemental environmental report. Continuing
environmental studies. Tennessee-Tombigbee Waterway,
Alabama and Mississippi Vol. VI, Appendix B. - Ecological
habitat maps. Corps of Engineers, Mobile, Alabama.

United States Department of Agriculture
1941 Climate and man. Yearbook in Agriculture. House
Document No. 27, 77th Congress, 1st Session; U.S.
Government Printing Office.

Walthall, John A. 1972 The

1972 The chronological position of Copena in eastern states archaeology. <u>Journal of Alabama Archaeology</u> 18, No. 2: 137-151.

Wynn, Jack T., and James R. Atkinson
1976 Archaeology of the Okashua and Self sites. Report
submitted to the National Park Service, Atlanta,
Georgia.

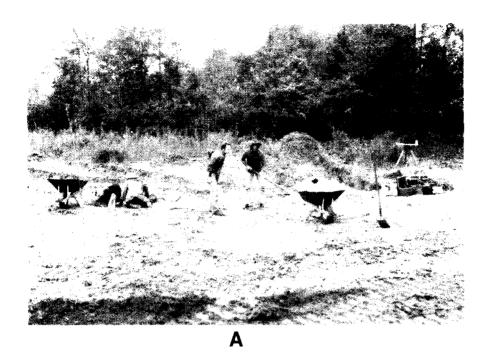
PLATES
I THROUGH XI

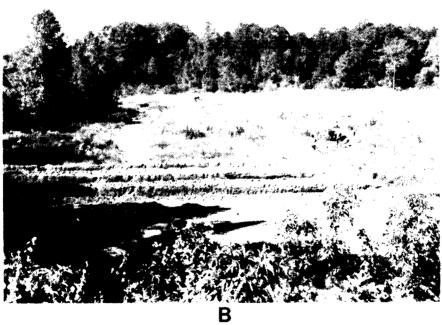
# Plate I

View towards the north of the area of prehistoric features.

# Plate II

General View of the site looking west from the railroad embankment.



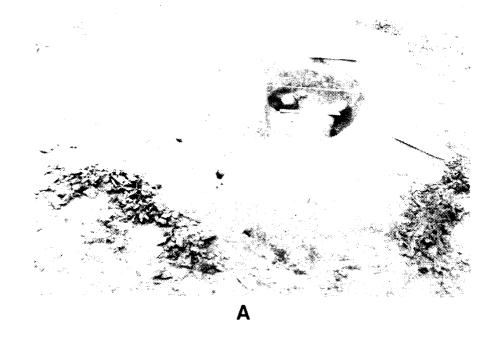


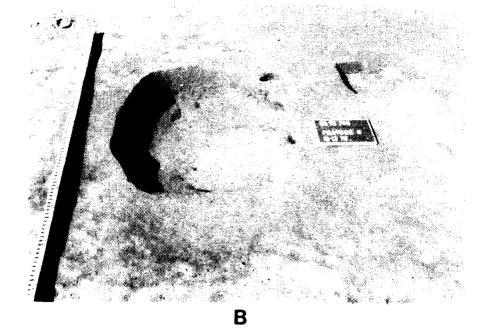
# Plate III

Feature 1. View of pit after partial excavation showing fill B pedestaled in right half.

# Plate IV

Feature 2. View of pit after removal of the fill.



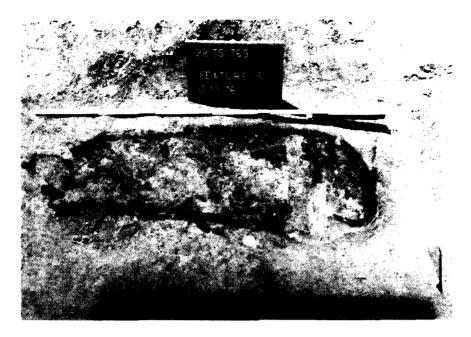


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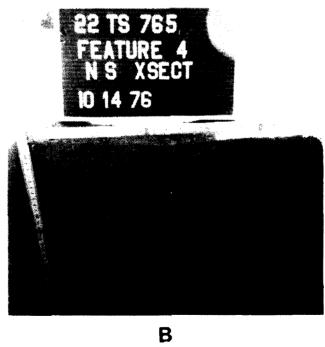
Feature 4. This feature was originally designated Feature 5.

# Plate VI

Post Hole 16. This post hole was originally designated Feature 4.



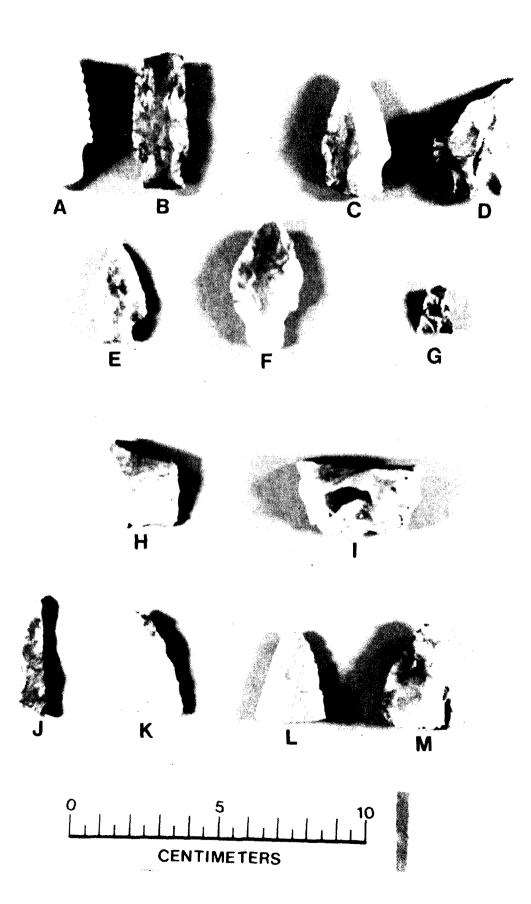
Α



## Plate VII

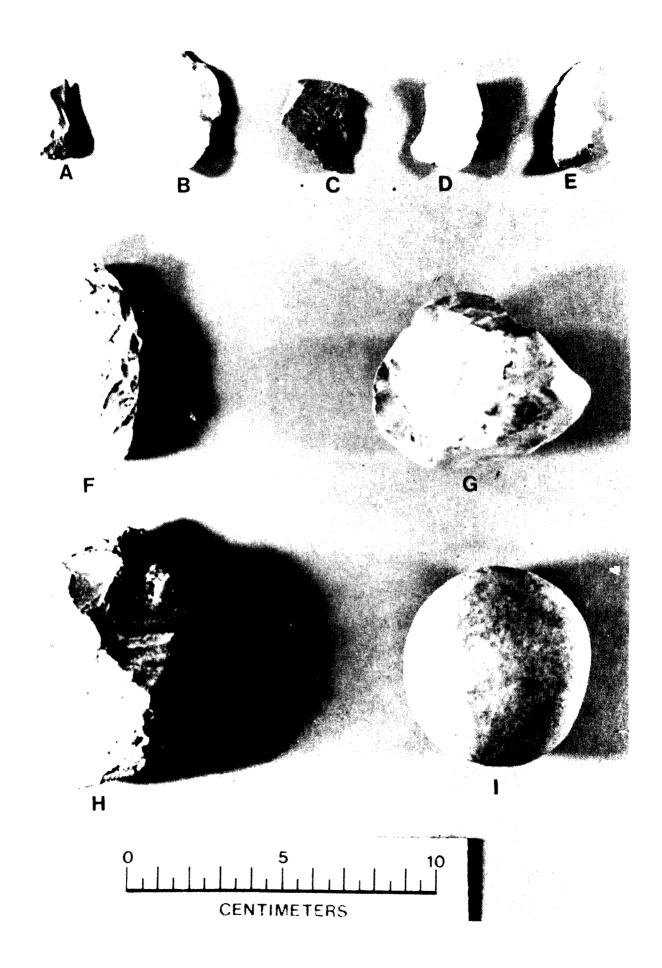
## Projectile Points and Bifaces

- A-B Flint Creek
  - C Kays
  - D Stemmed Preform
  - E Restemmed distal end
  - F P-1
  - G Madison
- H-I Preform fragments
- J-M Biface fragments



# Plate VIII

- A-B Gravers
- **G-E** Retouched Flakes
  - F Preform
  - G Tested Pebble
  - H Core
  - I Hammerstone



## Plate IX

Limestone tempered and Sand tempered Ceramics

A. Limestone tempered tetrapodal base from zone A of feature 1.

B. Baldwin Plain rim from zone A of feature 1.

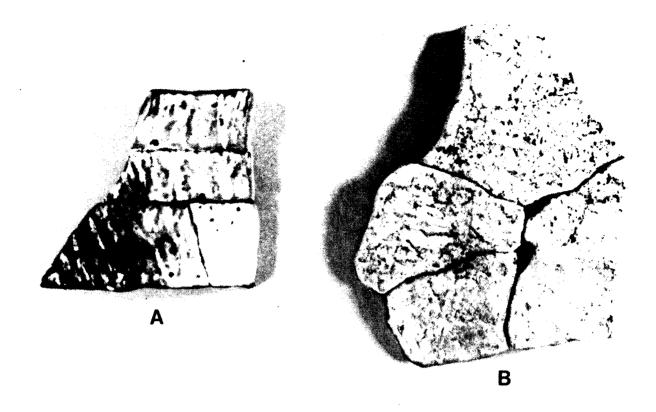


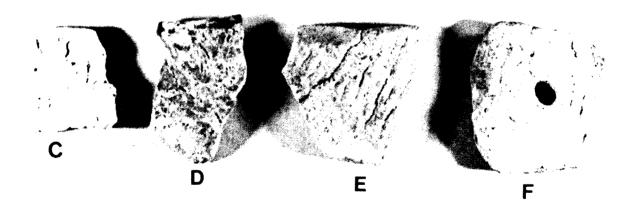
## Plate X

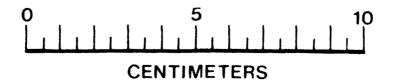
Ferruginous sandstone tempered and sand tempered ceramics

A-C Ferruginous sandstone tempered cord marked

D-F Furrs Cordmarked







## Plate XI

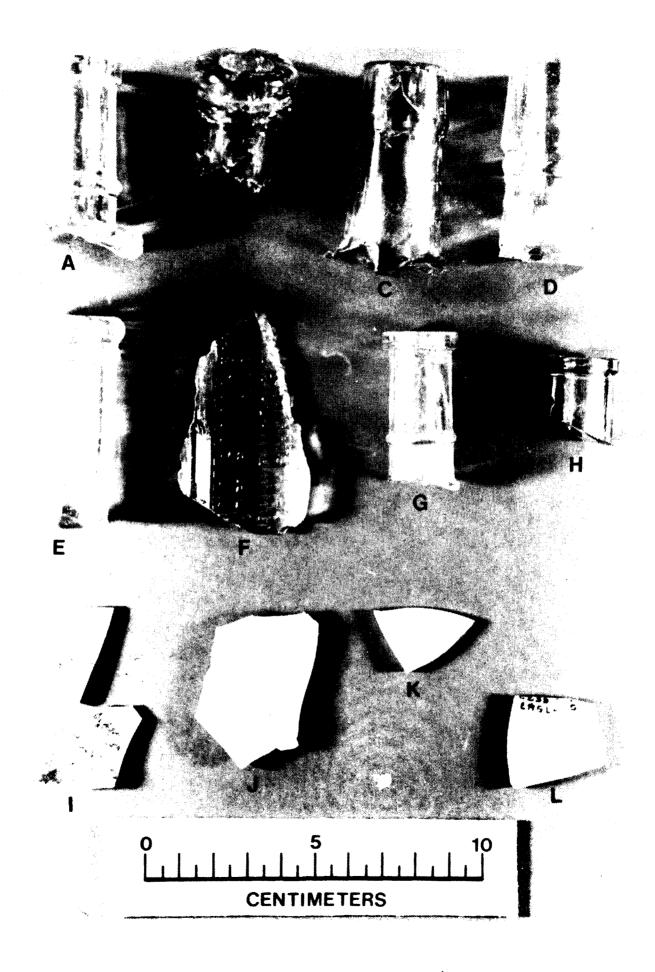
## Historic Glass and Ceramics

A-E	and	G-H	Mo1ded	glass	bottle	necks	with	hand
			applied	llips				

F Fragment of panel bottle with embossed lettering that reads:

"-UMBERLAND MFG."
"NASHVILLE, TEN-"

- I Brown transfer print white earthenware
- J Green transfer print white earthenware
- K Green and red hand painted white earthenware
- White earthenware with black backmark



## **APPENDIX**

ARCHAEOLOGICAL PLANT REMAINS FROM THE L. A. STRICKLAND I SITE
TISHOMINGO COUNTY, MISSISSIPPI
Ethnobotonical Report Number 496

Margeret Mosenfelder Ethnobotonical Laboratory University of Michigan December, 1976

الدون

#### INTRODUCTION

Analysis of plant materials from archeological sites can yield information which is not easily available from other data sources. The plant assemblage gives an indication of 1) the ecological conditions at the time a site was occupied, 2) the utilization of floral resources by a site's inhabitants and 3) the season or seasons during which a site was occupied.

Carbonized plant remains were recovered from three aboriginal features at the L. A. Strickland site (22Ts765). These features have been described in detail in the body of the report (pp. 18 - 22) On the basis of their form and content, Features 1 and 2 have been interpreted as open pit hearths (p. 41). It is suggested that Feature 3 was an earth oven (p. 42). The three features have been assigned to the Late Miller II phases by virtue of their artifact assemblages and carbon 14 dates (pp. 43 - 45). They are believed by the archeologists to represent either a single occupation or several brief occupations within a short time span.

#### **METHODS**

The botanical materials were separated from the fill of the features by water screening. Features 1 and 2 were water screened through window mesh. The material recovered by this process was then floated to separate out the plant remains. Although two distinct strata of fill were discerned in these features, the layers were not separated when the fill was screened. Feature 3 was water screened through ½" mesh and botanical materials were picked by hand from the rest of the materials recovered. Due to the larger mesh used, it is probable that some of the smaller plant remains, if present, were lost from this feature.

The plant materials recovered from the features were submitted to the University of Michigan's Ethnobotanical Laboratory for identification and interpretation. The samples were weighed and then sorted under a binocular microscope at 10X magnification. Due to its larger size and to time constraints, the sample from Feature 1 was randomly split into quarters prior to sorting. Only one of the quarters was processed. It is assumed that the materials in this subsample are representative in kind and relative quantity of those contained in the sample as a whole. The samples from Features 2 and 3 were processed in total. Once sorted, the plant remains were identified using manuals such as Martin and Barclay (1961), Brown (1928) and Brown and Panshin (1935) and by reference to the comparative collection at the Ethnobotanical Laboratory.

The botanical materials identified fell into three categories: carbonized wood, nutshells and seeds. Each category was treated separately. From each feature a sample of 20 pieces of carbonized wood was drawn and identified. Specimens were identified to genus and when possible to species. These samples give an indication of the wood types present and their proportionate representation in the features. Nutshells were sorted by genus and weighed. Seeds which retained their diagnostic characteristics were identified and counted. The presence of any unidentifiable seed was also noted.

#### **RESULTS**

The data are presented in tabulated form in Tables I through 4. Table I lists for each feature the total sample weights as well as the weights for wood charcoal, nutshells and any residue. The tiny seeds were not weighed. The figures for Feature I are projected from the quarter subsample processed to the expected weights for the sample as a whole. The wood charcoal identifications are given in Table 2. Both the actual number of pieces of each wood type and the percent representation in the sample are given. Table 3 lists the weight in grams of hickory and acorn shell from each feature. The seed identifications and counts are listed in Table 4. In addition to the materials listed in the above tables, small quantities of coagulated pine pitch were found in the samples from all three features.

Feature 1. The largest volume (250.9 gms) of botanical material was recovered from Feature 1. As discussed above this sample was randomly quartered prior to sorting. The processed quarter (66.7 gms) contained 44 gms of wood charcoal, 14.9 gms of hickory nutshell, .32 gms of acorn shell and roughly 6 gms of contamination. Extrapolation from the subsample figures gives the following weights for the total sample: wood charcoal 176 gms, hickory nutshell 59.6 gms and acorn shell 1.28 gms. The ratio of wood charcoal to nutshell is approximately 3 to 1. Six seeds were found in the processed quarter: 2 plum (prunus americana), 2 grape (Vitis sp.), 1 persimmon (Diospyros virginiana) and 1 round seed missing all diagnostic features.

Feature 2. The sample from Feature 2 contained 55 grams of material. Of the 55 gms, 24.1 gms were wood charcoal, 23.2 gms were hickory nutshell and .38 were acorn shell. The ratio of wood charcoal to nutshell is about 1 to 1. Only two seeds were recovered: a grape (Vitis sp.) and an unidentifiable embryo.

Feature 3. The sample from Feature 3 yielded only 17 grams of plant remains. The sample contained 8.92 gms wood charcoal, 7.90 gms hickory nutshell and .05 gms of acorn shell. The ratio of wood to nutshell is roughly 1 to 1. A grape seed (Vitis sp.), 1 honey locust seed (Gleditsia triacanthos) and 1 nutlet identifiable only to the rose family (Rosaceae) were found in the sample. It should be noted

TABLE 1
WEIGHT OF PLANT MATERIALS FROM FEATURES 1 THROUGH 3

Weight	Feat. 1	Feat. 2	Feat. 3
Sample Weight	250.9 g	55.0 g	<b>47.7</b> 5 g
Subsample	66.7 g	-	-
Wood Charcoal	176.0 g*	24.1 g	8.92 g
Nutshell	60.88 g*	23.58 g	7.95 g
Residue	24.0 g*	7.0 g	30.0 g

<sup>\* -</sup> extrapolated from subsample

TABLE 2
IDENTIFICATION OF WOOD CHARCOAL

		at. 1		at. 2		t. 3
Charcoal	##	<u>%</u>	#_	<u> </u>	#	%
Quercus	2	10%	5	25%	7	30%
(red oak group)						
Quercus	3	15%	4	20%	2	9%
(white oak group)						
Quercus sp.	1	5%				
Carya sp.	8	40%	3	15%	6	26%
(hickory)						
<u>Pinus</u> sp.	3	15%	4	20%	2	9%
(pine)						
<u>Fraxinus</u> sp.	3	15%		-	1	4%
(ash)						
Liquidambar styraciflua			1	5%	1	4%
(sweet gum)						
<u>Juglans</u> <u>nigra</u>			1	5%	2	9%
(black walnut)						
Acer sp.					2	9%
(maple)						
<u>Castanea</u> <u>dentata</u>			1	5%		
(chestnut)						
diffuse porous			1	5%		
TOTAL	20	100%	20	100%	23	100%

TABLE 3

NUTSHELL IDENTIFICATIONS

Nutshell	Feat. 1	Feat. 2	Feat. 3	
Carya sp. (hickory nut)	59.6 gm	23.2 gm	7.9 gm	
Quercus sp.	1.28 gm	.38 gm	.05 gm	
TOTAL	60.88 gm	23.58 gm	7.95 GM	

TABLE 4
SEED IDENTIFICATIONS

Seed	Feat. 1	Feat. 2	Feat. 3
<u>Vitis</u> sp.	8	1	1
(grape)			
Prunus americana	8		
(plum)			
Gleditsia triacanthos			1
(honey locust)			
Diospyros virginiana	4		
(persimmon)			
Nutlet cf. Rosaceae			1
Unidentifiable	1 round	! 1 embryo	
TOTAL	21	2	3

that due to the difference in field collection procedures, the figures for Feature 3 are not comparable to those from the other two features. Seeds and acorn shell were especially apt to have been lost through the  $\frac{1}{2}$ " mesh used for screening this feature.

The samples are not large enough to compare in detail the contents from the three features. However, two general comments can be made. First of all, the features contain an unusually high diversity of wood types. Secondly, all the features contain wood from oaks (both the red and white groups), hickories and pines as well as acorn and hickory nutshell and grape seeds.

#### DISCUSSION

The composition of the carbonized plant assemblage from the L. A. Strickland site gives a good indication of the local ecological conditions at the time the site was occupied. All plants represented in the samples could be found within the area today. This suggests that the climatic and edaphic conditions circa A.D. 650 were similar to those of the present.

Though the plants identified could all be found within the local area, they represent a range of moisture requirements and successional stages. According to the environmental statement prepared for the Tennessee-Tombigbee Waterway (U. S. Army Engineer District, Mobile, n.d.:13-22), in the area of the site oaks, hickories and sweet gum are generally climax species found in the uplands and on the better drained bottomlands. Pines are subclimax trees found in any of the physiographic zones in the area. Maple, ash, honey locust, permisson and grape are plants indicative of disturbed, bottomland habitats. These latter species are trees which can survive in the understory of a forest but which require open spaces for successful reproduction.

The varying moisture requirements of the plants represented in the assemblage can be accounted for by the physiographic position of the site. Within one quarter to one-half mile of the site, one could obtain plants from swamps, bottomlands, slopes and uplands.

The recovery of seeds and wood from subclimax, bottomland species suggests a prior disturbance of this habitat. Since plants such as persimmon, honey locust and grape require 10 to 20 years to reach mature fruit bearing stage, it can be proposed that at least a decade had elapsed from the time at which the habitat was disturbed to the time at which the site was occupied.

The disburbance of the bottomland habitat could have been a result of natural and human forces. Fire caused by lightning or the meander activities of Mackeys Creek could have produced the proposed subclimax conditions. On the other hand, the disturbance could have

been a result of earlier land clearance by man or of fires set for the purpose of driving game animals.

The present day environment of the site is rated only average for most game (U.S. Army Engineer District, Mobile n.d.). However, this may well be a product of contemporary management decisions accompanying recent logging and and agricultural practices. The broad range of plants suggest that circa A.D. 650 the area around the site would have been relatively rich in exploitable game and plant resources.

Evidence concerning the utilization of plant resources for subsistence consists of seed and nutshells. All of the seeds identified from the features arefrom the edible fruits of subclimax species. Since the number of seeds recovered was small, nothing definite can be said concerning preferences in collecting strategies. It may be proposed, however, that such diversity in so small a sample indicates an opportunistic strategy, i.e., the inhabitants collected anything edible which was ripe and readily accessible.

The volume of hickory nutshell recovered was considerably greater than that of acorn shell. Since hickory and oak trees would both have been common in the vicinity of the site, the difference in quantity could be indicative of a preference on the part of the inhabitants for nuts which could be immediately consumed as opposed to ones which required processing before they were edible. However, there are several other factors which could account for the variation in quantity. In the first place, the thicker shell of the hickory nut makes it more apt to survive the rigors of cracking, burning, burial and recovery. Secondly, in this region acorns ripen and fall in August and September. Once on the ground, acorns do not last long. They either germinate or become subject to rot or insect damage. Hickory nuts ripen later and can remain intact on the ground for a considerable period of time. Thus, the difference in quantity of the two nut types could reflect simple availability of nuts at the time the site was visited. Finally, as mast production varies from year to year, the difference could be a factor of the natural production cycles. All of the plants utilized for food would have been easily available for collection within a half mile radius of the site.

The carbonized wood recovered from the features presumably consists of the remains of wood collected for fuel. Considering their proposed functions as hearths, the features contained a remarkable diversity of wood types. Within the samples, the species appear to be represented roughly in proportion to their natural occurrence in the environment. These two factors suggest localized, non-selective collection of firewood within the natural catchment of the site.

The season in which the site was occupied can be fairly closely determined, if one assumes that the fruits and nuts collected were consumed immediately and not stored. Given the lack of storage pits

at the site, this is not an unreasonable assumption to make. As noted above, acorns ripen in August and September, while hickory nuts ripen from mid-September through October. The fruits represented in the samples ripened as follows: persimmon, Sept.-Nov.; grape, Aug.-Oct.,; plum, June-Oct.; and honey locust, Sept.-Oct. Though some of the utilized foods begin to be available in mid-summer and others are available through late fall, the nature of the site indicates a brief occupation (p. 42 ). If the site was occupied at a time when all of the plant foods were ripe, then the occupation must have occurred within the period from mid-September to October.

#### **CONCLUSION**

The nature of the botanical assemblage is consistent with the interpretation suggested by the archeologists of the Late Miller II component of the L. A. Strickland site. Based on the features and the lithic assemblage, they have proposed that this Middle Woodland component represents a hunting camp occupied for a relatively brief period of time, for a single season or at most for a few consecutive seasonal visits. The plant remains indicate generalized collecting of both food and fuel within the natural catchment of the site. Most probably, collection was for immediate consumption as there was no evidence of either storage facilities or plant processing tools. gathering activities could have been carried on by women and children while the men hunted farther afield. The evidence for seasonality indicates a narrow time span --mid-September to October--during which the occupation was most likely to have occurred. In sum, it appears that the location of the site was chosen so that a diversity of floral and possibly faunal resources was available within a small area. One might predict that when the resources easily exploited from the camp were exhausted, the members would have moved to a new camp in a similar location, thereby occupying several such camps within a relatively short time span.

#### REFERENCE LIST

Brown, Harry
1928 Atlas of the commercial woods of the United States.
Bulletin of the New York State College of Forestry,
Vol. 1 No. 4, Syracuse, New York.

Brown, H. and Panshin, A.

1934 Identification of the Commercial Timbers of the United
States.McGraw-Hill Book Co., New York.

Martin, A. and Barclay, W.

1961 <u>Seed Identification Manual</u>. University of California

Press, Berkeley, California.

U. S. Army Engineer District, Mobile
n.d. First supplemental environmental report. Continuing
environmental studies. Tennessee-Tombigbee Waterway
Alabama and Mississippi, Vol. V, Appendix B - An
ecological study of the Tennessee-Tombigbee Waterway.
Corps of Engineers, Mobile, Alabama.

U. S. Department of Agriculture

1974 Seeds of the woody plants in the United States. Agriculture Handbook No. 450, Forest Service, U. S. Department of Agriculture, Washington, D.C.

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